Appendix C. Forest Plan Consistency Table
and
Toiyabe Forest Plan (FP) Direction for Range Rescission Projects

Since this worksheet applies to grazing authorization projects, the range resource has been addressed first. Other resources follow in the order that they are discussed in the Toiyabe Forest Plan.

This worksheet only addresses forest-wide direction. Management area direction must be done separately. Every effort has been made to make this worksheet comprehensive, however, specialists should still review relevant portions of the FP to ensure that alternatives being considered are consistent with the FP. To the extent that noxious weed and predator control are separate programs, those topics were not exhaustively considered in the worksheet.

Forest management goals are concise statements describing a desired condition to be achieved sometime in the future. They are timeless in that they have no specific date on which they are to be completed. With implementation of this Forest Plan, the condition of the Toiyabe National Forest will begin to change, culminating in a more efficient and productive Forest by the year 2030. (p. IV-1)

Goals for each resource are stated in broad, general terms looking from the present into the future. The desired future condition is stated as how the Forest should appear in the year 2030 if implementation of the Plan is properly achieved. (p. IV-1)

Implementation of management direction to achieve the desired goals will be coordinated with the policies, programs, and objectives of other federal agencies, and state and local governments. (p. IV-1)

Management requirements necessary for achieving goals and objectives are referred to as “standards and guidelines.” These state the bounds or constraints within which management practices will be performed. Within this document, the terms “standard” and guideline” are interchangeable with no difference in meaning. The Forest-wide standards and guidelines described in the following section were developed to address public issues and management concerns; and to direct management practices in order to accomplish Forest-wide goals and objectives. (p. IV-13)

All proposed projects will have an economic analysis done and will be carried out if they are cost effective (total benefits (non-amenity and amenity)) exceeds total cost. (p. IV-13)

Range - Desired Future Condition (DFC)

Desired Future Condition (DFC) Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Ninety-five percent of all rangelands will have been brought to satisfactory condition.	p. IV-4	Yes	Under the Proposed Action the proper use criteria and design features will move the rangelands toward DFC. Alt.2- Rangelands would move toward DFC because domestic livestock would not be authorized.
Management plans will have been approved for all grazing allotments and wild and free-roaming horse and burro territories.	p. IV-4	Yes	Under the Proposed Action AMP's will be completed for 2 allotments. Alt. 2- would not authorize domestic livestock, so no AMP's would be approved.
Livestock and wild horse/burro use will have been maintained at pre-existing levels.	p. IV-4	Yes	Under the Proposed Action domestic livestock grazing will be authorized, but at reduced levels from pre-1986. Alt. 2- would not authorize domestic livestock grazing.
Noxious farm weeds will be under control.	p. IV-4	Yes	Under the Proposed Action the proper use criteria and design features will reduce the spread of noxious weeds. Attentive weed treatments would continue within the allotments. Alt. 2- would not authorize domestic livestock and the associated impacts (spread of noxious weeds) would be decreased.

Range - Goals

Goals Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Goal #1 - Rangelands will be in satisfactory condition or better.	IV-4	Yes	Under the Proposed Action the proper use criteria and design features will move the rangelands toward DFC. Alt.2- Rangelands would move toward DFC because domestic livestock would not be authorized.
Goal #2 - All grazing allotments and wild and free-roaming horse and burro territories will be under approved management plans.	IV-4	Yes	Under the Proposed Action AMP's will be completed for 2 allotments.

Goals Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
			Alt. 2- would not authorize domestic livestock, so no AMP's would be approved.

Range - Standards and Guidelines (S&G)

Standards and Guidelines (S&G) Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
1. Coordinate trailing activities with adjacent National Forest and/or BLM allotments.	IV-26	Yes	Under the Proposed Action sheep trailing efforts will be coordinated with the Carson District BLM, and the Bridgeport Ranger District. Alt.2- would not authorize domestic livestock grazing.
2. Maintain range administration improvements at a level sufficient to meet the purpose of the project and for the life of the project.	IV-26	Yes	Under the Proposed Action the water developments within the Leviathan and Campbell-Loope Allotments will be maintained, and fencelines would be removed as time and budgets allow. Alt. 2- would not authorize domestic livestock grazing; improvements would not be maintained, and removed as time as budgets allow.
3. Consolidate administration responsibilities where Forest lands are adjacent to public lands.	IV-26	Yes	Under the Proposed Action the Leviathan and Campbell-Loope Permits will be ran in conjunction with the Bridgeport Ranger District. Alt.2- would not authorize domestic livestock grazing.
4. Develop allotment management plans for all active range allotments and wild free-roaming horse and burro territories.	IV-26	Yes	Under the Proposed Action AMP's will be completed for 2 allotments. Alt. 2- would not authorize domestic livestock, so no AMP's would be approved.
6. Ensure that water developments and other range improvements meet wildlife needs.	IV-26	Yes	Under the Proposed Action the design feature to install wildlife escape ramps in water troughs will be applied. Alt.2- would not authorize domestic livestock grazing.
7. Where feasible, locate all range improvements away from travel corridors, especially trails, popular	IV-26	Yes	Under the Proposed Action new water trough within the Leviathan and Campbell-Loope Allotments would be

Standards and Guidelines (S&G) Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
fisheries, and other water courses. When not feasible to separate the uses, incorporate design and landscape management principles to mitigate visual impacts in accordance with the Visual Landscape Handbook.			moved constructed in the surrounding uplands away from the riparian area. Fencelines would be removed as time and budgets allow. Alt.2- would not authorize domestic livestock grazing; range improvements would not be needed.
8. Provide gates or fence passage on trails as needed to facilitate access.	IV-26	Yes	Under the Proposed Action gates will not be needed due to the kind of livestock (sheep), which can be herded. Fence will not be maintained and removed as time and budgets allow. Alt.2- would not authorize domestic livestock grazing and associated range improvements.
10. Describe ecological sites, develop SCORE cards to rate ecological status and resource values, and define management strategies for rangeland management.	IV-26	Yes	In 2007, 2013, 2014 and 2018, Long-term ecology monitoring plots were read to determine the ecological condition for vegetation communities within the Leviathan-Loope project area; furthermore, under the Proposed Action, proper use criteria and design features guide management strategies. Alt.2- would not authorize domestic livestock grazing.
11. Utilize Toiyabe National Forest range suitability standards.	IV-26	Yes	The Interdisciplinary Team completed an in-depth suitability analysis for the Leviathan-Loope project area. Lands within the Leviathan-Loope project area are considered to be suitable for livestock grazing.
12. Strive to achieve or maintain a minimum of 60 percent ground cover on upland rangelands with the exceptions of low sagebrush types, Wyoming big sagebrush types, crested wheatgrass seedings, pinyon/juniper types, and south facing sagebrush types on granitic slopes of the Sierra Nevada.	IV-26	Yes	Under the Proposed Action proper use criteria and design features will maintain 60 percent ground cover on upland rangelands. Alt.2- would not authorize domestic livestock and associated impacts in the project area.
13. Minimize recreation-range conflicts through Allotment Management Plan.	IV-26	Yes	Under the Proposed Action, design features will minimize recreation-range conflicts: by changing the Campbell-Loope Allotment boundary the Pacific Crest

Standards and Guidelines (S&G) Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
			Trail will be avoided; avoid trailing on established recreation trails wherever possible. Alt. 2- would not authorize domestic livestock grazing and associated impacts to recreation would not occur.
14. Conduct monitoring and evaluation in accordance with FSH 2209.21, Range Environmental Analysis Handbook, and the Nevada Rangeland Monitoring Handbook.	IV-26	Yes	Under the Proposed Action, short-term and long-term monitoring will occur within the Leviathan-Loope project area. Alt. 2- would not authorize domestic livestock grazing; therefore, short-term monitoring would not occur. Long-term monitoring may occur as budgets and time allow.
15. Achieve or maintain rangeland in satisfactory condition which is defined as: (1) having a resource value rating (RVR) of 50 or above for vegetation or other features; or (2) being in a mid-succession or higher class of ecological status; and (3) having a stable or upward trend in soil and vegetation. NOTE: Criteria for RVR of vegetation include species, growth form, foliage type, forage value, proper use factor, production, cover, density, frequency, abundance, or other. The criteria used depend upon the particular use or benefit of highest importance of the site or area. For example, status of soil and vegetation on a watershed may be the most important resource value; or the production of browse on key deer winter range; or vegetative cover along stream; or plant diversity as related to scenic beauty.	IV-26-7	Yes	Under the Proposed Action the proper use criteria and design features will move the rangelands toward DFC. Alt.2- Rangelands would move toward DFC because domestic livestock would not be authorized.
16. Ensure that permittees maintain structural improvements in accordance with grazing permits.	IV-27	Yes	Under the Proposed Action the permittees will be responsible for maintaining 9 water developments within the Leviathan Allotment, and 5 within the Campbell-Loope Allotment. Fencelines will not be

Standards and Guidelines (S&G) Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
			maintained and will be removed as time and budgets allow. Alt. 2- would not authorize domestic livestock grazing; improvements would not be maintained.
17. Update allotment and territory management plans that are not consistent with the Forest Plan, following the schedule found in Chapter V.	IV-27	Yes	Under the Proposed Action AMP's will be completed for 2 allotments. Draft AMP's can be found in the appendices of the Leviathan-Loope Rangeland Project EA. Alt. 2- would not authorize domestic livestock, so no AMP's would be approved.
18. Complete range analysis, including inventory and evaluation, following Regional standards and the schedule set by the Forest Supervisor.	IV-27	Yes	Range analysis was completed according to Regional Standards for the Leviathan-Loope Rangeland Project. Under the Proposed Action additional future analysis would occur. Alt.2- would not authorize domestic livestock grazing; therefore, there would be no additional need for range analysis.
19. Develop allotment management plan in consultation with all parties involved, including permittee(s), state, or other federal agencies, and any other organizations or individuals.	IV-27	Yes	Under the Proposed Action AMP's will be completed for 2 allotments. Borda Land and Sheep Company has been involved in the draft AMP for Leviathan, and F.I.M. Corp has been involved in the draft AMP for Campbell-Loope. Permittee involvement will continue into the finalization of the AMP's. Alt. 2- would not authorize domestic livestock, so no AMP's would be approved.
20. Each allotment management plan shall present administrative and management requirements of the specific range allotment or wild free-roaming horse or burro territory, Each plan will contain sections on objectives, actions, monitoring, and evaluation. A. The action section will include seasons of use, number of livestock permitted, the grazing	IV-27	Yes	Under the Proposed Action AMP's will be completed for 2 allotments. All required sections will be included in the AMP's. Alt. 2- would not authorize domestic livestock, so no AMP's would be approved.

Standards and Guidelines (S&G) Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
system, schedule of range rehabilitation, and schedules for initiating and maintaining range improvements. Schedules are to include priorities, responsibilities, and planned completion dates. The action section must also include a statement of actions required to allow for other uses and resources, and for resolving conflicts. B. The monitoring and evaluation section will address actual use by livestock, production and utilization, ecological, status and trends, and permittee compliance with management requirements.			
21. Implement non-continuous use management systems on all livestock grazing allotments. When feasible, use a rest rotation system when significant range is in unsatisfactory condition.	IV-27	Yes	Under the Proposed Action, a rest-rotation/ or deferred rotation management system will be used to guide the vegetation condition to satisfactory. Alt. 2- would not authorize domestic livestock grazing and associated impacts in the project area.
22. Prepare an annual operating plan for each grazing allotment. The annual operating plan is the action plan that implements management decisions during the current year. Annual operating plans should be mutually developed by the District Ranger and permittee. The annual operating plan will consist of a narrative and graphics. A. The narrative will include, where applicable: 1. Clear and definite instructions concerning management of livestock while on the	IV-27-8	Yes	Under the Proposed Action, with the authorization of livestock grazing an Annual Operating Plan for each allotment will be completed. The Plans will include all of the listed components in the Forest Plan. Alt. 2- would not authorize domestic livestock grazing; therefore, there would not be a need for Annual Operating Plans.

Standards and Guidelines (S&G) Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
allotment. This should include the schedule for each unit to be grazed, expected amount of time each unit will be grazed, allowable forage, utilization, how the livestock will be moved from unit to unit, and standards for livestock removal from the allotment. 2. Range improvement maintenance responsibility for the current year, when the maintenance will be accomplished, and the maintenance standards to be attained. 3. A list of range improvement projects to be started or completed during the current year. 4. Any necessary instructions concerning trailing and/or trucking livestock to and/or the allotment. 5. Special instructions on camp sanitation and fire prevention responsibilities of the permittee. 6. Multiple-use coordination requirements with which the permittee is expected to comply, including animal control practices and compliance with endangered and threatened species requirements. B. The graphic section should include: 1. A map showing allotment and management unit boundaries, range improvements, closed areas, and special management situations.			

Standards and Guidelines (S&G) Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
2. Acceptable forms for recording actual use, losses, improvement maintenance, and other management data.			
23. Involve livestock permittees, other federal and state agencies, and interested parties in the development of allotment and territory management plans. Utilize the Coordinated Resource Management and Planning Process (CRMP) as appropriate.	IV-28	Yes	Under the Proposed Action AMP's will be completed for 2 allotments. All required sections will be included in the AMP's. Alt. 2- would not authorize domestic livestock, so no AMP's would be approved.
25. Forage Utilization Standards described below are to be used as maximum standards for the development of proper use criteria. Design of management systems will include the specific utilization standards to be applied. These standards should be applied based on utilization of key plant species by key area. Soil disturbance may also be used to determine proper use and is often the best measure of proper use on sheep ranges and on granitic slopes.	IV-28	Yes	Under the Proposed Action proper use criteria recommended in the SNFPA, as amended, will be used. The maximum forage utilization standards are less than the (IV-29) values. The absence of Alpine communities within the project area alleviates the need for standards. Alt.2- would not authorize domestic livestock grazing; therefore, forage utilization standards would not be needed.

TABLE IV-6 MAXIMUM FORAGE UTILIZATION STANDARDS (IV-29)

Management System	Vegetation Type	Maximum percent Utilization By Key Species			
		GRASS OR FORB		SHRUB	
Season Long		Conditions Class		Conditions Class	
		Unsatisfactory	Satisfactory	Unsatisfactory	Satisfactory
	Aspen Sagebrush, Mountain brush and grassland	40%	45%	30%	40%
	Riparian	45%	55%	20%	30%
	Alpine	30%	40%	20%	30%
Rest or Deferred	Sagebrush, Mountain brush and grassland, Aspen	45%	55%	40%	50%

Management System	Vegetation Type	Maximum percent Utilization By Key Species			
	Riparian	55%	65%	25%	35%
	Alpine	40%	45%	25%	35%

Standards and Guidelines (S&G) Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
26. Proper use criteria will be established, in writing, for each unit of each crazing allotment. Proper use criteria are a mandatory part of each allotment management plan. Long-term trend studies are also mandatory to determine if proper use criteria are correct and to determine what is occurring in regard to range condition. Proper use criteria will be developed through ID team input. It is necessary that criteria be based on the factor that becomes critical first - the limiting factor. In some range units or pastures, it may be necessary to establish more than one set of proper use criteria. This is especially true where riparian areas are involved. Establishing proper use criteria requires ID team involvement. Proper use criteria define the permissible grazing level in the range unit or pasture. The following standards must be observed when identifying limiting factors and proper use criteria: A. Soil and vegetation are the basic resources. The condition of these two resources must be maintained or improved. If they are in satisfactory condition, then they must be maintained in this condition. If they are in less than satisfactory condition, then allowance must	IV-30	Yes	Under the Proposed Action, proper use criteria are described in detail in the Vegetation Specialist Report located in the Leviathan-Loope Rangeland Project project record. Alt. 2- would not authorize domestic livestock grazing and the associated impacts in the project area. Proper use criteria would not be needed.

Standards and Guidelines (S&G) Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
be made for improvement in condition. Any use causing a downtrend condition of these two resources should be modified or elimination whether caused by livestock, wildlife or any other use. B. After requirements for the soil and vegetative resources have been provided, the other resources, such as livestock grazing, wildlife, and aesthetics, can be considered. This is the point where the OD team is involved. Trampling of soils by grazing animals may result in either soil displacement or soil compaction. This effect of grazing may become a limiting factor before the maximum allowed utilization of the key plant species is reached. In this situation, the amount of soil displacement or compaction will determine the limit of allowable grazing use rather than utilization of key species. Proper use guides based on soil displacement should generally be as follows: On steeper slopes and on loose sandy soils, evidence of trampling should not exceed 10 percent (light) as determined within sample plots. Usually trampling can be tolerated on slopes less than five percent and on slopes up 11 to 30 percent with heavier textured soils. Certain stream bank zones may be an exception. Soil compaction is detrimental on heavy soils, particularly if they are wet. Meadows are most susceptible to compaction. Proper use is defined as moderate compaction or less.			

Standards and Guidelines (S&G) Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
27. Allow no livestock grazing two grazing seasons after prescribed or natural fires and plantings or seedings.	IV-30	Yes	Under the Proposed Action, this guideline would be located in the AMP's as well as incorporate the BSSG recommended 3 growing seasons of rest. Alt.2- would not authorize domestic livestock grazing.
28. Complete livestock adjustments needed to obtain an acceptable balance between available livestock forage and livestock numbers and season of use.	IV-31	Yes	A complete file search and comparison of livestock numbers and season of use was completed for the Leviathan-Loope Rangeland Project. This analysis can be found in the Leviathan-Loope Range Specialist Report under "Occupancy (stocking) Rates" section. Under the Proposed Action, numbers and season of use are adjusted. Alt. 2- would not authorize domestic livestock grazing.
30. Allow livestock conversions based on resource needs, capability, and management objectives and not solely based on the desires of the livestock A. Conversions will be made in accordance with a management plan, and current range analysis, and if the necessary range improvement structures are in place. B. When conversions are made mainly for convenience of the permittee, the range improvement structures necessary to complete the conversion will be financed and constructed by the permittee. Construction will be in accordance with Forest Service standards.	IV-31	Yes	The Proposed Action does not include livestock conversion. It continues the use of sheep on 2 existing sheep and goat allotments within the project area. Therefore, A. and B. do not apply. Alt.2- would not authorize domestic livestock grazing, and would not convert the kind of livestock.
WILD FREE-ROAMING HORSES AND BURROS			
1. Manage wild free-roaming horses and burros in accordance with the Wild Free-Roaming Horse and Burro Act of 1971.	IV-31	No	

Standards and Guidelines (S&G) Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
2. Employees will follow the principles of the Forest Service Host Program in all dealings with the public.	IV-31	No	
3. Coordinate closely with local and state governmental agencies, special interest groups, and affected publics in all management activities of the Toiyabe.	IV-31	No	
4. Manage wild free-roaming horses and burros to population levels compatible with resource capabilities and requirements.	IV-31	No	

Recreation

Recreation – Desired Future Condition (DFC)			
Humboldt FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
The Forest will offer a variety of opportunities for developed and dispersed recreational experiences.	IV-2	No	This project does not change number or quality of recreational experiences
ORV use will be allowed where such use is not incompatible with other resource programs. … Closure or restrictions will occur where there is obvious conflict with other uses and where natural resource damage result .	IV-2	No	This project does not affect ORV use
The following areas will be closed either through the year or seasonally to ORV use: 1. Roads and trails which are closed by sign, gate, or barricade including earthen barricades extending the width of the road. 2. Where it is necessary to remove obstacles such as racks, logs, or soil or where there would be damage to vegetation. 3. Developed recreation sites (except for ingress and egress to parking facilities).	IV-2-3	No	This project does not affect ORV use

4. Key wildlife habitat such as winter range, fawning, and lambing areas. 5. Rights-of-way for electrical transmission lines, pipelines, or telephone lines. 6. Riparian zones unless specifically designated by a Forest Officer. 7. Timber regeneration areas where trees are less than ten feet high. 8. Wilderness 9. "Areas" and trails managed for nonmotorized recreation activities as shown on ranger district travel plans and maps 10. Areas with easily erodible soils			
Recreation - Goals			
Humboldt FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Goal #1 - The Toiyabe will increase the quality and quantity of developed and dispersed recreation opportunities with particular emphasis in the Sierra Nevada and the Spring Mountains of Southern Nevada.	IV-1	No	This project does not add or remove any developed or dispersed recreation opportunities
Recreation – Standards and Guidelines (S&G)			
Humboldt FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
1. Manage the Forest to provide a wide variety of opportunities within the Recreation opportunity Spectrum (see glossary for definitions and Chapter III for acres).	IV-13	No	This project does not alter ROS or change recreation opportunities.
4. Protect the scenic quality of the Forest by achieving the designated visual quality objectives (VQO), unless modified by a site-specific environmental assessment.	IV-14	No	This project does not alter VQO

Visual Management

Visual Management – Desired Future Condition (DFC)			
Humboldt FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
The Forest's landscape will have been managed to achieve the following visual quality objectives (VQOs): 1. "Preservation" - where only ecological changes have occurred (396,600 acres) 2. "Retention" - management practices are not evident to the casual observer (438,000 acres) 3. "Partial Retention" - management practices are visually subordinate (1,022,400 acres) 4. 'Modification" - management practices may have dominated the landscape but activities should appear as natural occurrences in the fore- and middle-ground (1,086,700 acres) 5. "Maximum Modification" - management practices may have dominated the landscape but activities should appear as natural occurrences in the background (228,000 acres)	IV-3	No	This project does not alter VQO

Visual Management - Goals			
Humboldt FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Goal #1 - The Forest landscape will be managed with a sensitivity for visual quality.	IV-3	No	This project does not alter VQO

Fire and Fuel Management

Fire and Fuel Management – Desired Future Condition (DFC)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Fire and fuel management will have been implemented at a level that achieved the least cost plus least net value change on all management areas, except those where management direction required a more intense level of protection.	IV-4	No	
Fire and Fuel Management - Goals			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Goal #1 - The Forest will provide an effective fire management program that is responsive to land and resource management objectives.	IV-4	No	
Fire and Fuel Management – Standards and Guidelines (S&G)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
5. Natural fuel treatment projects will meet multi-resource objective.	IV-15	No	
6. Vegetation manipulation may be required to meet protection objective.	IV-15	No	

Public Information and Coordination

Public Information and Coordination – Desired Future Condition (DFC)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
The public will fully understand the mission of the Toiyabe specifically, and the Forest Service as a whole.	IV-5	No	
Decisions made on the Toiyabe National Forest will have benefited from public involvement through the soaping and NEPA process.	IV-5	No	
Public Information and Coordination - Goals			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Goal #1 - The Toiyabe will provide information to the public on the Forest's mission and program.	IV-4	No	
Goal #2 - The public, state, local, and other federal agencies will be involved in the Toiyabe' s decision-making process by fully implementing the Forest Service National Environmental Policy Act (NEPA) process at providing adequate "scoping" of issues per FSH 1909.15.	IV-5	No	
Public Information and Coordination – Standards and Guidelines (S&G)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
1. Keep interested groups, organizations, and individuals informed about Toiyabe programs. Involve the public in the Forest's decision-making process.	IV-31	No	
2. Employees will follow the principles of the Forest Service Host Program in all dealings with the public.	IV-31	No	
3. Coordinate closely with local and state governmental agencies, special interest groups, and affected publics in all management activities of the Toiyabe.	IV-31	Yes	Informal Consultation occurred with FWS concerning LCT occupied habitat within the Campbell-Loope Allotment.

Wilderness

Wilderness - Desired Future Condition (DFC)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
The addition of 261,500 acres to the wilderness system will have perpetuated wilderness values for future generations.	IV-5	Yes	Under the Proposed Action some of this project is located within Mokelumne Wilderness. Wilderness Values were analyzed and changing the boundary of Campbell-Loope will exclude wilderness. Alt. 2- would not authorize domestic livestock grazing.
Wilderness - Goals			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Goal #1 - Existing and recommended wilderness will be designated and managed to protect wilderness values.	IV-5	Yes	Under the Proposed Action some of this project is located within Wilderness. Wilderness Values were analyzed with no effect found. Alt. 2- would not authorize domestic livestock grazing.
Goal #2 - Quality wilderness experiences will be provided for the public.	IV-5	Yes	Under the Proposed Action some of this project is located within Wilderness. Wilderness Values were analyzed with no effect found due to the boundary adjustment of Campbell-Loope Allotment. Quality Wilderness experiences within the Mokelumne have not been significantly altered as a result of this project Alt. 2- would not authorize domestic livestock grazing.
Wilderness – Standards and Guidelines (S&G)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
3. Administratively control use of motorized equipment and mechanized transport to sustain optimum characteristic wildness values while managing for purposes of the Act. To the extent feasible, exclude the sight and sound and other tangible evidence of motorized equipment and mechanical transport.	IV-32	Yes	Under the Proposed Action some of this project is located within Mokelumne Wilderness. Wilderness Values were analyzed and changing the boundary of Campbell-Loope will exclude wilderness. No existing or new water developments are located within wilderness.

			Alt. 2- would not authorize domestic livestock grazing.
4. Travel shall be by foot or horse, or other non-mechanical means consistent with the primitive character of wilderness.	IV-32	Yes	Under the Proposed Action some of this project is located within Mokelumne Wilderness. Wilderness Values were analyzed and changing the boundary of Campbell-Loope will exclude wilderness. Alt. 2- would not authorize domestic livestock grazing.
8. Evaluate all permanent improvements for compatibility with policy and regulations.	IV-32	No	No improvements are included in the Proposed Action or Wilderness. The boundary will be adjusted and exclude wilderness. Alt. 2- would not authorize domestic livestock grazing.
Wilderness – Management Area 5 – Existing Wilderness			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Management emphasis will be directed toward meeting objectives and intent of the Wilderness Act.	IV-107	Yes	Under the Proposed Action some of this project is located within Wilderness. Wilderness Values were analyzed and changing the boundary of Campbell-Loope will exclude wilderness. Alt. 2- would not authorize domestic livestock grazing.
Wilderness will be managed to provide outstanding opportunities for solitude, physical and mental challenge' primitive recreation, and to maintain wilderness characteristics of the land.	IV-107	Yes	Under the Proposed Action some of this project is located within Wilderness. Wilderness Values were analyzed and changing the boundary of Campbell-Loope will exclude wilderness. Alt. 2- would not authorize domestic livestock grazing.
Continuity and consistency of management decisions will be maintained among the separate authorities administering different portions of the same wilderness.	IV-107	Yes	Under the Proposed Action, some of this project is located within Wilderness. Wilderness Values were analyzed and changing the boundary of Campbell-Loope will exclude wilderness. Alt. 2- would not authorize domestic livestock grazing.
Paiute cutthroat trout will have the highest priority in Silver King, Coyote Valley, and Corral Valley, and will be managed to provide for recovery as per the Paiute Recovery plan. All conflicts will be mitigated or eliminated.	IV-107	No	

Lahontan cutthroat trout habitat will be enhanced. Cooperation with the California Department of Fish and Game, and the US Fish and Wildlife Service will serve to maintain and increase populations.	IV-107	Yes	Under the Proposed Action, some of this project is located within Wilderness; however, LCT occupied habitat is outside of wilderness. Informal Consultation with FWS determined that the Proposed Action may effect but is not likely to adversely affect the federally listed as threatened, LCT. Alt. 2- would not authorize domestic livestock grazing.
Cultural Resources Inventory and evaluation will be conducted prior to alteration or removal of any historical structures.	IV-108	No	Under the Proposed Action, maintenance and reconstruction of existing water developments will occur. All structures associated with the developments has been evaluated in the Section 106 and Heritage Specialist Report. Alt. 2- would not authorize domestic livestock grazing.
Wildlife Maintain and improve Paiute cutthroat trout habitat in Silver King, Coyote Valley, and Corral Valley. Paiute cutthroat trout will have the highest priority in these areas and will be managed to provide for recovery. All conflicts will be mitigated. Improve fishery habitat to good condition in all other portions of the area.	IV-109	No	
Wildlife As opportunities arise, coordinate with the California Department of Fish and Game, and provide reintroduction of California bighorn sheep and peregrine falcon in Mono County.	IV-109	No	
Range Coordinate livestock trailing with adjacent National Forest allotments.	IV-109	No	
Range Complete 17 new range structural improvements that meet criteria of protecting or maintaining wilderness values.	IV-109	Yes	Under the Proposed Action there are 3 new water developments proposed, but not within wilderness. Furthermore, grazing would not occur within the Mokelumne Wilderness. Alt 2- would not authorize domestic livestock grazing.

Range Livestock grazing operations, where established prior to designation of wilderness, shall, pursuant to Sec. 4(d) (4) (2) of the Wilderness Act, be permitted to continue, subject to provisions of 36 CFR 293. "Committee Guidelines and Policies Regarding Grazing in National Forest Wilderness Areas" (H.R. Report No. 96-1126, dated 6/24/80) will be applied in a practical, reasonable, and uniform manner in all National Forest wildernesses. These guidelines and policies are applicable only to livestock grazing operations.	IV-109-110	Yes	Under the Proposed Action livestock grazing would occur within the Carson Iceberg Wilderness in the Dumont Allotment. Alt. 2- would not authorize domestic livestock grazing.
Range Permit motorized access and uses for livestock management in the Wolf Creek drainage that existed prior to wilderness designation and in accordance with direction in the 1984 California Wilderness Act.	IV-110	No	
Range Continue the administrative grazing closure of identified allotments to protect soil and water resources.	IV-110	No	
Water and Soil Implement measures to protect and rehabilitate streams and lakesides that have been adversely affected by human use.	IV-110	No	
Water and Soil Place restrictions within Hoover on camping activities within 100 feet of streams and lakes. Advise all visitors to camp at least 100 feet from streams and lakes in the Carson-Iceberg and Mokelumne where topography permits. In no case will camping be closer than 25 feet.	IV-110	No	
Facilities Transfer Connell's Cow Camp maintenance to range permittee and the California Department of Fish and Game.	IV-110	No	

Timber

Timber – Desired Future Condition (DFC)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Well-managed vegetative manipulation of timber stands will have resulted in a reduction of insect and disease problems; provided access to many areas of the Forest for resource management activities; and reduced wildfire hazards.	IV-5	No	
Soils will not have been degraded and water quality will have been maintained or improved.	IV-5	No	
Timber - Goals			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Timber – Standards and Guidelines (S&G)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
18. Where possible, use timber management activities to improve wildlife habitat and forage for domestic livestock.	IV-36	No	
21. Four main objectives for treatment of the pinion/juniper resource were identified and specific guidelines developed. Many treatments not specifically identified will fall into these far objectives, with slight change of cutting cycle and/or intensity. It is up to the resource eager to identify the objective of the treatment and apply guidelines as needed, tailoring them to each specific area. The four main objectives identified are: A. Forage production for livestock B. Deer and elk habitat improvement C. Wildlife habitat diversity improvement D. Sustained yield of pinyon pine and juniper	IV-37	No	

22. Where forage production for livestock is the primary objective, the following guidelines will be applied: A. Harvest sites must classify as suitable range. B. Soils mist be of a moderate or high potential for producing forage, i.e., greater than 300 lbs/acre, air dry weight. C. If criteria A and B are met, then apply the following: 1. Desirable species of forage exist at a level sufficient when released to occupy the site. a. Cut trees of all ages and sizes b. Determine if slash is needed to meet grant cover requirements. -Yes, then lop and scatter slash - No, then pile slash on stumps and burn 2. Sparse understory of forage exists. a. Cut trees of all ages and sizes at a stump height of four to six inches above ground level to allow drilling. b. Determine if the site is suitable for mechanical seeding; e.g., drilling. -Yes, then remove slash by broadcast burnting and/or piling slash on tree stumps and burning. Drilling should follow shortly after burning to reduce chances of invasion by cheatgrass. -No, then lop and scatter slash and broadcast seed in the fall.			

Soil, Water, and Riparian Areas

Soil, Water, and Riparian Areas – Desired Future Condition (DFC)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Greater emphasis on environmental quality will have had positive effect on the soil and water resources.	IV-6	Yes	Alt. 1 Proper use criteria, including allowable utilization for riparian and upland vegetation, 20% limit on streambank disturbance, and location of bedding areas away from water will have positive effect on soil and water resources. Closure of 3 Allotments and the boundary adjustment for Campbell-Loope will have positive effect on soil and water resources. Alt. 2 No grazing throughout the project area will have positive effect on soil and water resources.
Specific riparian area standards and guidelines, and greater emphasis on rangeland management will have significantly benefited riparian area-dependent resources.	IV-6	Yes	Alt. 1 Proper use criteria, including allowable utilization for riparian and upland vegetation, 20% limit on streambank disturbance, and location of bedding areas away from water will have positive effect on soil and water resources. Closure of 3 grazing allotments and portions of Campbell-Loope will have positive effect on soil and water resources. Alt. 2 No grazing throughout the project area will have positive effect on soil and water resources.
Direct soil and water resource improvement projects will have arrested the decline and, in some instances, restored the productivity of key watersheds.	IV-6	NA	Specific soil and water improvement projects are not part of this proposed action.
Instream flows will protect riparian area-dependent resources against incompatible water resource development.	IV-6	NA	Acquiring instream flow rights outside the scope of this project.
Use of Forest-wide resource inventory and greater emphasis on water resource inventory will have resulted in greater project success, less impact on soil and water resources, and avoidance of losses from	IV-6	NA	Project level inventories were conducted for this analysis.

management activities in hazardous areas such as floodplains.			
Monitoring will provide information for quicker response to management-induced impacts on soil and water resources.	IV-6	Yes	Alt 1. Both short-term and long-term monitoring would be used to determine if adjustments are needed in the grazing strategy.
Knowledge to properly implement projects will also be gained from continued monitoring.	IV-6	Yes	Alt. 1 Short-term and long-term monitoring results can be applied to other allotments.
Water yields will not have increased on the Forest.	IV-6	NA	Project not predicted to affect water yield.
Soil, Water, and Riparian Areas - Goals			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Goal #1 – High quality water yields will be enhanced for approximately 949,500 acre feet to meet state water quality standards. Water rights and instream, flows will be acquired as necessary for management and use of the National Forest.	IV-6	Yes	Alt. 1 Proper use criteria and project design features utilized to maintain high quality water. Water rights acquisition outside the scope of this project.
Goal #2 – The Forest will improve water quality and manage riparian areas to satisfactory condition. All riparian area-dependent resources will be maintained or enhanced. Water resource improvement projects and other projects will be designed to improve and maintain the quality of water and soil resources.	IV-6	Yes	Alt. 1 Riparian areas would be managed using proper use criteria and project design features to improve to functioning condition. Water resource improvement projects outside the scope of this project.
Soil, Water, and Riparian Areas – Standards and Guidelines (S&G)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
1. For purposes of carrying out portions of the State Water Quality Management Plan pertaining to activities on the Forest: A. Meet responsibilities in the Management Agency Agreement between the State Water Resource Control Board, State of California, and the Forest Service, dated April 1, 1981. B. Meet responsibilities in the Memorandum of Understanding between the Forest Service and	IV-40	Yes	Scoping done to both the Lahontan Region Water Quality Control Board and the NV Division of Environmental Protection.

the Division of Environmental Protection, Nevada Department of Conservation and National Resources.			
3. Implement "Best Management Practices" for protection and improvement of water quality and soil productivity as described in Water Quality Management for National Forest System Lands in California and the state of Nevada nondesignated area water quality management plan "Handbook of Best Management Practices."	IV-40	Yes	National Core BMPs issued in 2012 integrate individual State and Forest Service regional BMPS. Project design features and proper use criteria are BMPs incorporated into this project.
4. Meet or exceed state water quality standards as found in California's "North Lahontan Basin Water Quality Control Plan" and the "The State of Nevada Water Pollution Control Regulations."	IV-40	Yes	Alt. 1 Water quality standards and effects of proposed action on meeting standards for CA and NV discussed in Chapter 3. Most water quality standards would be met, with possible exception of fecal coliform standard in California. This standard may be exceeded at some time during the grazing season in some of the streams. Alt 2. No impacts from grazing on water quality. Standards would be met.
5. Protect soil productivity and water quality by adhering to erosion prevention and control measures presented in the publications: "Technical Guide - Erosion, Prevention and Control on Timber Sale Areas - Intermountain Region and "Soil and Water Management, Nov. 1979."	IV-40	NA	Not a timber sale.
6. Soil disturbing activities will not exceed estimated soil loss tolerance limits Forest-wide (300 lbs/acre/year for granitic and 500 lbs/acre/year for other soils). Exceptions may occur on specific sites where maintenance of soil productivity is not feasible (e.g., construction projects) or where research or administration studies demonstrate more accurate tolerance limits. The modified Universal Soil Loss Equation, the R1/R4 Sediment Yield Model, or other appropriate methodologies will be used to evaluate soil loss differences between project alternatives.	IV-40	Yes	Alt. 1 – Proper use criteria and project design features would be applied to reduce soil loss. Alt. 2 – No impacts from grazing in the project area.

7. Conduct Order II Soil Survey or field verified Order III Soil Survey on significant site disturbing or vegetative manipulation projects and on rangeland benchmarks.	IV-41	NO	Soil surveys not conducted for this project.
9. Water needed for National Forest System management, but not available user state law and not meeting the Supreme Court criteria for a reserved right until the Organic Administration Act, will be secured by citing the applicable federal law and conditioning occupancy permits.	IV-41	NA	The Forest Service has water rights in the project area allocated under the Alpine Decree.
10. Whenever water rights are authorized by federal or state law, these will be quantified, documented, and recorded. Applicable fees will be paid by the benefiting resource unit.	IV-41	Yes	Water rights in the project area used for irrigation are documented in the Alpine Decree. The FS pays annual fees.
Riparian Areas			
1. All standards and guidelines listed for soil, water, and range management applies to riparian areas.	IV-42	Yes	Alt 1 – Specific proper use criteria and project design features for riparian areas included in proposed action. Alt. 2 – No grazing. No impacts to riparian areas from grazing.
2. Recognize the importance and distinctive values of riparian areas when implementing management activities. Give preferential consideration to riparian area-dependent resources over other resources in cases of unsolvable conflicts.	IV-42	Yes	Alt. 1 – Specific proper use criteria and project design features for riparian areas included in proposed action. Alt. 2 – No grazing. No impacts to riparian areas from grazing.
3. Delineate and evaluate riparian area prior to implementing any project activity.	IV-42	Yes	Alt. 1 – Riparian areas evaluated using Eastern Sierra NV Riparian field guide.
4. Design range and wildlife habitat improvement projects and/or silvicultural prescriptions in riparian areas to benefit riparian area dependent resources.	IV-42	Yes	Alt. 1 – Under the Proposed Action, proper use criteria and design features will allow for maintenance of riparian areas currently in functioning ecological condition and improvement for those currently considered functioning-at-risk. Water developments will be designed to protect the integrity of the stream and riparian areas.

			Alt. 2 – No grazing will be permitted. No impacts to riparian areas from grazing.
5. Manage riparian areas to achieve or maintain a medium or high ecological status.	IV-42	Yes	Alt. 1 – Proper use criteria and design features will allow for maintenance of riparian areas currently in functioning ecological condition and improvement for those currently considered functioning-at-risk Alt. 2 – Riparian areas will not be grazed under the No Grazing alternative.
6. Give priority to range, wildlife habitat, and watershed improvement projects that will rehabilitate riparian areas that cannot be restored in a timely manner by other management techniques. Use fencing for protection of riparian areas only where no other viable alternative exists.	IV-42	Yes	Alt 1 –design features such as no concentrated use in riparian areas, will help maintain watershed improvements
7. On streams where Lahontan cutthroat and Paiuts cutthroat trout are present or scheduled for introduction, the riparian areas should be maintained or improved to a “good” or “excellent” resource value rating for fisheries.	IV-42		Alt. 1 - Occupied habitat for LCT occurs on the east fork Carson River. Informal Consultation with FWS determined a may affect not likely to adversely affect. Streambank alteration is 20%. Alt 2 – No grazing will be permitted in the project area.
8. Maintain or improve the Biotic Condition Index (BCI) on 95 percent of the streams to a minimum standard of 85 BCI.	IV-42	yes	Alt 1 – Proper use criteria and project design features would allow for maintenance of BCIs of 85 or greater. Alt 2 – Streams would not be impacted by livestock use under this alternative. No effect to BCI.
10. Strive to achieve and maintain at least 90 percent of natural bank stability for streams supporting Lahontan or Paiute cutthroat trout, and 80 percent on all other streams.	IV-42		Alt. 1 - Occupied habitat for LCT occurs on the east fork Carson River. Informal Consultation with FWS determined a may affect not likely to adversely affect. Streambank alteration is 20%. Alt. 2 – No grazing will be permitted. Streambanks would not be impacted by livestock use.
11. Locate salt and sheep bedgrounds outside riparian areas.	IV-42		Alt. 1 – Project design features and BMPs under the proposed action prohibits concentrated use areas within .25 miles of riparian areas. Alt 2 – No grazing will be permitted.

12. Place new livestock water developments outside riparian areas.	IV-42	Yes	Alt 1 – No new water developments will be placed in riparian areas; existing ones will remain. Alt. 2 – No grazing would be permitted.
13. Move inventoried water developments out of riparian areas when and where feasible.	IV-42	Yes	Alt 1- not feasible to move water developments out of riparian areas. 2 within Campbell-Loope Allotment- Poor Boy and Herder Spring
15. Avoid direct and indirect support of floodplain development and new construction in wetlands wherever there is a practical alternative.	IV-43	No	No floodplain development in this project
16. Capitalize on opportunities to resolve and preserve the natural and beneficial values served by floodplain and to preserve, enhance, and manage the natural and beneficial values of wetlands.	IV-43	yes	Alt. 1 – Proper use criteria and project design features would preserve the natural and beneficial values of wetlands. Alt 2 – No Grazing alternative would preserve, enhance and manage the beneficial values of wetlands.

Wildlife and Fish

Wildlife and Fish – Desired Future Condition (DFC)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Habitat conditions for Paiute and Lahontan cutthroat trout (threatened species-federal list) will be “good” to excellent,” and both fish will have been delisted.	IV-7	Yes	Alternative 1-Under the Proposed Action informal consultation occurred with FWS for the LCT occupied habitat along the east fork Carson River. There is no habitat for PCT in the project area. Proper use criteria and design features would protect habitat for LCT Alternative 2- Under the No-Action alternative, no live-stock grazing would occur. LCT would remain undisturbed from livestock grazing and habitat will continue to move toward DFC
Habitat conditions for the bald eagle and peregrine falcon will have been maintained.	IV-7	Yes	Alternative 1-Under the Proposed Action, no impacts to bald eagle or peregrine falcon nesting or foraging habitat would occur. Potential for disturbance to foraging for these species would be minimal and result in negligible impacts.

			Alternative 2- Under the No-Action alternative, no live-stock grazing would occur. Habitat for bald eagles and peregrine falcons would be maintained. No disturbance during foraging from livestock grazing.
Peregrine falcons will be present on the Sierra districts.	IV-7	Yes	Habitat for peregrine falcons occurs along the E. Carson River but is not known to be occupied. Alternative 1 and the No Action Alternative will have no effect on the potential for occupancy in this area by peregrine falcons
Management of habitat for MIS, sensitive species, fish, and big game species will have been emphasized.	IV-7	Yes	Alternative 1-A thorough analysis was conducted for all MIS and TES species with potential to occur in the project area. Based on the analysis, the Proposed Action would only result in minimal impacts to species and would improve habitat conditions for some species groups. Alternative 2- Under the No-Action alternative, no live-stock grazing would occur. Habitat for MIS, sensitive, big game and fish will be undisturbed from livestock grazing.
Riparian habitats will have been improved by emphasizing their protection and restoration.	IV-7	Yes	Alternative 1-Under the Proposed Action, all habitat groups including riparian areas would be moved toward a more functioning (satisfactory) condition benefiting wildlife. Streambank disturbance is limited to 20%. No concentrated use of livestock within .25 miles. Alternative 2- Under the No-Action alternative, no live-stock grazing would occur. Under the No-Action alternative ecological conditions in riparian areas would eventually move toward more functioning ecological conditions benefiting wildlife. Under the Alternative 2 Silver King Valley would not be irrigated which, depending on drying trends, could limit expansion of riparian vegetation

Sensitive plant species will be protected.	IV-7	Yes	Alternative 1-There is no known occurrences of Sensitive plants within the project area. However, suitable habitat is present. Design features associated with the Proposed Action would include avoiding rare plant populations if they are discovered in the future. Alternative2- Under the No-Action alternative, no live-stock grazing would occur. No disturbance to potential habitat for rare plants from livestock grazing
The Toiyabe will have continued to work with other agencies, particularly the Nevada Department of Wildlife and the California Department of Fish and Game, to determine what opportunities exist for habitat management.	IV-7	Yes	Alternative 1-Coordination with Nevada Department of Wildlife, California Department of Fish and Wildlife, and US Fish and Wildlife Service has occurred during the planning process for the Leviathan-Loope Range project. The FS engaged in informal consultation with FWS and provided a concurrence letter for LCT. Alternative 2- Under the No-Action alternative, no live-stock grazing would occur. District will continue to coordinate with state agencies
Wildlife and Fish - Goals			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Goal #1 - Threatened, endangered, and sensitive species will be recognized and protected through habitat management and coordination with state wildlife agencies. Habitat will be in good-to-excellent condition. Lahontan cutthroat trout will be delisted. Paiute trout species will be firmly established. Bald eagle habitat will be maintained and peregrine falcons successfully reintroduced in the Sierra.	IV-6-7	Yes	Alternative 1-The project is designed to minimize impacts to TES species and improve habitat conditions for many species' groups. Trailing sheep across the east fork Carson River within the Campbell-Loope Allotment may affect LCT, but the shallow water used for tailing is an unlikely place for trout to occur. This activity will occur twice per year, will be short in duration at each crossing event, and will occur outside of spawning season. Alt 1 may affect but is not likely to adversely affect LCT. Alternative 2- Under the No-Action alternative, no live-stock grazing would occur. Habitat conditions would remain undisturbed from livestock grazing for TES. Coordination with state agencies would remain ongoing

Goal #2 - Fish and game populations will be enhanced and managed at levels commensurate with habitat conditions with an emphasis on improving overall quality of wildlife habitat.	IV-7	Yes	Alternative 1-A thorough analysis was conducted for all MIS and TES species with potential to occur in the project area. Based on the analysis, the Proposed Action would only result in minimal impacts to species and would improve habitat conditions for some species groups. Alternative 2- Under the No-Action alternative, no live-stock grazing would occur. There would be no disturbance to existing habitat conditions from livestock grazing
Wildlife and Fish – Standards and Guidelines (S&G)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
4. Manage ecosystems containing sensitive plant and animal and threatened and endangered animal populations to maintain or increase these populations and to achieve recovery.	IV-49	Yes	Alternative 1-Under the Proposed Action, all habitat groups would be moved toward a more functioning (satisfactory) ecological condition. A thorough analysis was conducted for all MIS and TES wildlife and plant species with potential to occur in the project area. Based on the analysis, the Proposed Action would only result in minimal impacts to species and would improve habitat conditions for some species groups. Alternative 2- Under the No-Action alternative, no live-stock grazing would occur. No disturbance to habitat from livestock grazing for TES plants and wildlife would occur.
5. Coordinate management practices which may affect threatened and endangered animal species with the US Fish and Wildlife Service, and California and Nevada state wildlife agencies.	IV-50	Yes	Alternative 2-coordination with CDFW, NDOW, and FWS regarding LCT, sage grouse, desert bighorn sheep, Sierra Nevada bighorn sheep, and mule deer has occurred during the planning process. Alternative 2- Under the No-Action alternative, no live-stock grazing would occur. Continue coordination with state and federal agencies would occur
6. Improve habitat for threatened or endangered species, and sensitive species that have been	IV-50	Yes?	Alternative 1-. A thorough analysis was conducted for all MIS and TES wildlife and plant species with potential

adversely affected by man's activity in wilderness areas.			to occur in the project area. Based on the analysis, the Proposed Action would only result in minimal impacts to species and would improve habitat conditions for some species groups. Alternative 2- Under the No-Action alternative, no live-stock grazing would occur. Occupied and potential habitat for LCT would be undisturbed from livestock grazing.
7. Apply grazing management system aimed at improving key habitat for big game animals and fisheries. As a maximum, browse utilization by livestock or wild horse on key winter ranges will not exceed 30 percent on those areas prior to big game use.	IV-50	Yes	Alternative 1-Under the Proposed Action, proper use criteria (including utilization standards) are designed to improve the ecological function of all habitat groups in the project area. Because sheep grazing does not require fences, all existing fences within the allotment will be removed which will help protect mule deer from injury. Alternative 2- Under the No-Action alternative, no live-stock grazing would occur. Habitat for big game species would be undisturbed from livestock grazing
8. Minimize disturbing activities (grazing, timber, mining, etc.) on key mule deer habitat (fawning areas, winter rage, riparian areas, holding areas, migration corridors, etc.).	IV-50	Yes	Alternative 1 -Based on the effects analysis, only minor disturbance to mule deer and their habitat is expected under the Proposed Action. Alternative 2-Habitat for mule deer would be undisturbed from livestock grazing
9. Manage habitats of wolverine, Mount Lyell salamander, yellow warbler, and other wildlife species that may have declining populations or narrow habitat requirements, to assure viable populations at reasonable distributions. Encourage surveys and other data gathering activities for these species.	IV-50	Yes	Alternative 1-Wolverines are not known to occur in the project area and are believed to be extirpated from the State of California. Habitat for other wildlife species such as Mt. Lyell salamander and yellow warbler would be maintained or improved under the Proposed Action. Alternative 2- Under the No-Action alternative, no live-stock grazing would occur. Habitat for Mt. Lyell salamander and yellow warbler would be undisturbed from livestock grazing.

10. Manage aspen stands at a mid-succession or higher ecological status with emphasis on improving age-class structure	IV-50	Yes	Alternative 1-Aspens stands are currently functioning at risk within the project area. Under the Proposed Action, proper use criteria and design features would move all habitat groups, including aspen, to improved ecological function. Alternative 2- Under the No-Action alternative, no live-stock grazing would occur. Aspen stands would be undisturbed from livestock grazing- and would likely continue to improve toward an ecologically functioning condition
11. Perform field inventories to identify habitat occupied the threatened and endangered species. Determine habitat needs and management strategies	IV-50	Yes	Alternative 1-Information collected from surveys for multiple wildlife species (goshawk, great gray owl, flammulated owl, migratory birds) was used to inform the analysis for MIS and TES species. Alternative 2-District wide inventories will continue for TES, MIS and migratory birds
Threatened, Endangered, and Sensitive Species			
1. Manage Forest habitats and activities to achieve recovery of threatened and endangered plant species and to ensure that sensitive plant species do not become threatened or endangered.	IV-51		Alternative 1-The project is designed to minimize impacts to TES species and improve habitat conditions for many species groups. The Proposed Action may affect, but is not likely to adversely affect LCT. Alternative 2- T Under the No-Action alternative, no live- stock grazing would occur. here would be no disturbance to TES species habitat from livestock grazing
2. Determine distribution, status, and trend of threatened, endangered, and sensitive plant species and their habitats on Forest lands following the schedule set by the Forest Supervisor.	IV-51	N/A	
3. Coordinate Forest progress with other federal agencies, states, and other groups and individuals concerned with the conservation of threatened, endangered, and sensitive plant species.	IV-51	Yes	Alternative 1- coordination with CDFW, NDOW, and FWS regarding LCT, sage grouse, and Sierra Nevada bighorn sheep has occurred during the planning process.

			Alternative 2- Coordination with state and federal wildlife agencies would continue
4. Prohibit the taking of threatened and endangered plant species except under Fish and Wildlife Service permit. Prohibit the collection or taking of sensitive plants except as authorized by the Forest Supervisor.	IV-51	N/A	

Human Resources

Human Resources – Desired Future Condition (DFC)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Along with completion of projects that will benefit society as a whole, participants in the program will have an understanding of the Forest Service and it many programs.	IV-7	NA	
Human Resources - Goals			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Goal #2 - The Forest will continue to provide equal opportunity to all persons regardless of race, creed, sex, marital status, age, handicap, religion, or national origin.	IV-7	NA	
Human Resources – Standards and Guidelines (S&G)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
2. Inform the general public, including minorities and the underprivileged, of benefits and opportunities available through Forest program.	IV-51	NA	

Cultural Resources

Cultural Resources – Desired Future Condition (DFC)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
The Cultural Resource Overview (having been completed in 1988) will guide management decisions and direction, and provide a necessary link to the Nevada State Historic Preservation Plan. In the Overview, areas will have been delineated for moderate and high archaeological sensitivity, and work targeted for completion of a Forest-wide cultural resource inventory.	IV-8	NA	This is Forest level planning and not directed towards project level work.
The inventory of National Register properties will provide useful planning tool for effective management of the cultural resource in relation to other resource needs. Protection, enhancement, and interpretation of National Register quality properties will have been on-going.	IV-8	NA	This is also a forest level planning tool, not directed for projects; however, a cultural resource report was written for the current undertaking.
Cultural Resources – Goals			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Goal #1 - Forest-wide programmatic inventory and evaluation will be implemented to identify cultural resources on the Toiyabe.	IV-8	NA	This is a forest-wide direction, not intended for project level work. This forest wide inventory was never completed and the work to complete this level of inventory is ongoing. A cultural resource report was written for the current undertaking.
Goal #2 - Significant properties will be identified, evaluated for National Register nomination, and protected, as appropriate.	IV-8	Yes	A cultural resource report was completed for the current undertaking. Not all sites that have been recorded within the project area have been evaluated for inclusion to the National Register of Historic Places.
Goal #3 - The Forest will manage cultural resources in a comprehensive manner and eliminate “crisis management.”	IV-8	Yes	A cultural resource report has been completed for the current undertaking. It identifies a strategy for adaptive management based on monitoring and phased implementation of water developments.

Cultural Resources – Standards and Guidelines (S&G)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
1. Standards and guidelines will be consistent with procedures accepted by the State Historic Preservation Office (SHPO) and professionally accepted standards supported by the archaeological community in the area. Direction in this Plan calls for full implementation of these standards and guidelines in managing cultural resources on the Forest and in complying with applicable federal laws and regulation including but not limited to: the National Historic Preservation Act of 1966, as amended (NHPA); Executive Order 11593; the implementing regulations in 36 CFR 800 and 36 CFR 60; supplementary Advisory Council guidelines; the Antiquities Act of 1906; and the Archaeological Resources Protection Act of 1979. Consultation with the SHPO, the President's Advisory Council on Historic Preservation, and the Keeper of the Register will be conducted, as appropriate, in fulfilling responsibilities under Section 106 of the NHPA, as implemented by 36 CFR 800, and the regulatory mandates of 36 CFR 60.	IV-51	Yes	This is the way all cultural resources surveys and projects are handled on the forest. The forest conducts all cultural surveys and projects to meet this direction. This is how we do our work on all projects.
3. Complete a Cultural Resource Overview by 1988 and use as a guide in conjunction with the State Historic Preservation Plan for project survey and Forest-wide cultural resource management (CRM).	IV-52	NA	This overview will be used for forest plan direction and not project level planning. A project specific cultural resource overview is presented in the report for the current undertaking.
5. Conduct Forest-wide programmatic inventory. This will aid in planning, management decisions, and the development of an inventory of National Register properties. To implement Forest-wide inventory, base data will be prepared for identifying high and moderate sensitivity for cultural resources. Priority will be given to areas with the highest predictability and based on issues, values, risks, and input from the SHPO as appropriate.	IV-52	NA	This forest-wide inventory is ongoing. Areas identified as "high-use" have received Class III inventory for the current undertaking.

6. A cultural resource inventory will be conducted prior to surface disturbing projects and when there is an agency decision which could have an effect on significant sites in areas where previous survey and evaluation have not been accomplished. Resource activities impacting known cultural resources will allow for evaluation and, where needed, mitigation of impacts prior to project implementation.	IV-52	Yes	All bedding and watering locations have been identified and design feature proposed to avoid adverse effects.
8. For inventory purposes, a mix of intensive, systematic survey and intuitive survey will be conducted with actual coverage depending on such variables as slope, vegetation car, and 10CM or suspected sensitivity. For intensive, systematic survey, 30 meter intervals generally will be the maximum used although transect interval can be either shortened or widened depend law depending on professionally acceptable level of recordation of properties and a survey report are required.	IV-52	Yes	All bedding and watering locations have been intensively surveyed.
9. Where appropriate, conduct thematic inventory and evaluation for known eligible or potentially eligible properties; e.g., structures of the Civilian Conservation Corps (CCC) era. As appropriate, the best examples will be nominated to the National Register and to the extent possible managed for preservation-in-place.	IV-52	Yes	A cultural resource report was completed for the current undertaking. Most sites within watering and bedding locations were evaluated for listing in the National Register.
10. Evaluate all identified cultural resources for National Registry eligibility. To achieve programmatic goals Forest-wide, priority will be given to sites with known National Register potential especially where degradation or other disturbance might endanger the integrity of the property.	IV-52-53	Yes	Not all sites within the allotments have been evaluated for inclusion to the National Register of Historic Places. Most sites within watering and bedding locations were evaluated for listing in the National Register.
11. At the project level, assessment will include effects of proposed undertakings, recommendations of feasible alternatives to protect cultural resource values, and input into EA/EIS documents.	IV-53	Yes	Most sites within watering and bedding locations were evaluated for listing in the National Register. There are eligible and unevaluated sites within watering and bedding locations; however, the AMP will include

			requirements to avoid adverse effects. Unevaluated sites will be treated as eligible.
12. Properties will be evaluated as to their potential to contribute data significant to the prehistory or history of the nation, state, or local area pursuant to 36 CFR 60 and direction in the State Historic Preservation Plan. At a minimum, the following criteria will be considered as appropriate: A. Data relating to the Victorian settlement frontier, the mining frontier, ranching industry, industrial development, transportation and communication corridors, lumber industry, and ethnic populations. B. Data pertaining to prehistoric occupation including cultural affiliation, chronology, adaptation, synchronic and diachronic variation, paleoenvironmental reconstruction, and depositional history. C. Data of a local or regional nature as outlined in the Archeological Element of the State Historic Preservation Plan.	IV-53	Yes	Most sites within watering and bedding locations were evaluated for listing in the National Register. There are eligible and unevaluated sites within watering and bedding locations; however, the AMP will include requirements to avoid adverse effects. Unevaluated sites will be treated as eligible.
14. As appropriate, avoidance, data recovery, or other mitigation practices will be implemented when significant cultural resources will be affected by project impacts. Avoidance may necessitate redesign of a project. Data recovery and mitigation plans will be in compliance with applicable laws, regulation, and supplementary Advisory Council guidelines.	IV-53	Yes	Most sites within watering and bedding locations were evaluated for listing in the National Register. There are eligible and unevaluated sites within watering and bedding locations; however, the AMP will include requirements to avoid adverse effects. Unevaluated sites will be treated as eligible.
15. Significant cultural resources will be protected from disturbance and deterioration from natural processes. All cultural resources will be protected from unauthorized disturbance and collection. An emphasis will be placed on protection measures such as signing, fencing, rehabilitation, stabilization, monitoring, law enforcement, and public information.	IV-53	Yes	By improving conditions within the allotments and improving soil conditions the chance for impact from erosion and other natural process will be reduced. There is a monitoring component to project.

Lands and Special Uses

Lands – Desired Future Condition (DFC)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
	IV-8	NA	
Lands - Goals			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
	IV-8		
Lands – Standards and Guidelines (S&G)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Lands	IV-54-55	NA	
Special Uses	IV-62-64	NA	

Transportation System and Facilities

Transportation System and Facilities – Desired Future Condition (DFC)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
	IV-8-9	NA	
Transportation System and Facilities - Goals			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
	IV-9	NA	
Transportation System and Facilities – Standards and Guidelines (S&G)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
	IV-55-56	NA	

Law Enforcement

Law Enforcement – Desired Future Condition (DFC)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
The public will be educated in proper use of the Forest.	IV-10	NA	
Timber theft, arson, fraudulent leasing of range privileges, mining abuses, and vandalism will be minimal. Violations will be reported and proper action taken.	IV-10	NA	
Law Enforcement - Goals			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
	IV-10	NA	
Law Enforcement – Standards and Guidelines (S&G)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
	IV-55-56	NA	

Minerals

Minerals – Desired Future Condition (DFC)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
	IV-8-9	NA	
Minerals - Goals			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
	IV-9	NA	
Minerals – Standards and Guidelines (S&G)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance

	IV-57-61	NA	

Air Quality

Air Quality – Desired Future Condition (DFC)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
	N/A	NA	
Air Quality - Goals			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
	N/A	NA	
Air Quality – Standards and Guidelines (S&G)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
	IV-64-65	NA	

Research Natural Areas

Research Natural Areas – Desired Future Condition (DFC)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Research natural areas will have been managed and protected to maintain established objectives.	IV-12	NA	
Research Natural Areas - Goals			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Goal #1 - Research values will be preserved and protected within the Mount Jefferson, Carpenter Canyon, and Babbitt Peak RNAs.	IV-11	NA	
Goal #2 - RNAs will be maintained for research, study, observation, and monitoring; and for kinds of	IV-11	NA	

educational activities that are not destructive or manipulative, and that ensure unmodified conditions.			
Goal #3 - RNAs will contribute to: a) Preservation and maintenance of genetic diversity. b) Protection against serious environmental disruptions. c) The study of succession. d) Baseline controls for research measuring ecological and hydrological effects of land management manipulation techniques and practices. e) On-site and extension educational activities. Desired Future Condition	IV-11	NA	
Research Natural Areas – Standards and Guidelines (S&G)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
2. Management practices, such as livestock grazing, control of excessive animal populations, or prescribed burning, may be authorized by the Station Director, Intermountain Forest and Range Experimental Station, with approval of the Forest Supervisor, when necessary to preserve the vegetation for which the area was created.	IV-65	NA	
4. Physical improvement such as roads, fences, or buildings will not be permitted within RNAs unless temporarily needed to fulfill scientific potential.	IV-65	NA	
5. RNAs are to be protected from fires, insects, diseases, and animals that are not a part of the natural processes of the area. Wildfires occurring within RNAs will be allowed to burn undisturbed, unless they threaten persons or property outside the area. Debris resulting from fires should not be cleaned up nor should any fire hazard reduction or	IV-65	NA	

reforestation be undertaken. No action is to be taken against endemic insects, diseases, or wild animals.			
8. Where RNAs occur within a wilderness, the most restrictive guidelines will apply.	IV-65	NA	

Economic and Environmental Efficiency

Economic and Environmental Efficiency – Desired Future Condition (DFC)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Forest Service management program will have been conducted in the least costly method of meeting the goals and objectives of the Plan.	IV-12	NA	
Economic and Environmental Efficiency - Goals			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Goal #1 - The Toiyabe will produce a mix of goods and services within the bounds of its physical, biological, social, and economic environment.	IV-12	NA	
Goal #2 - The Forest will be managed in a manner that is sensitive to economic efficiency.	IV-12	NA	
Economic and Environmental Efficiency – Standards and Guidelines (S&G)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
	N/A		

Integrated Pest Management

Integrated Pest Management – Desired Future Condition (DFC)			
Toiyabe FP Forestwide Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC

Noxious farm weeds and significant outbreaks of range pests will be treated as necessary.	IV-12	Yes	Under the Proposed Action noxious weed infestations will not be exasperated by livestock grazing due to specific design features and proper use criteria. Alt. 2- would not authorize domestic livestock grazing and associated impacts in the project area.

Management Area Direction

Management Area #3 Alpine

Total Management Area Direction			
Management Area Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Coordination with federal, state, and local agencies will be provided for the key resources of developed and dispersed recreation, wildlife, aesthetics, and watershed.	IV-87	Yes	Scoping done with the Lahontan Region Water Quality Control Board and the NV Division of Environmental Protection.
Vegetative manipulation will be conducted to enhance watershed, range, wildlife, aesthetic, and vegetative vigor and to minimize the potential for catastrophic wildfire, and insect and disease infestations.	IV-87	No	This project does not include vegetative manipulation
Cooperation with the California Department of Fish and Game and the US Fish and Wildlife Service, will provide for future habitat for the Lahontan cutthroat trout.	IV-87	Yes	The project is designed to minimize impacts to TES species and improve habitat conditions for many species' groups. Trailing sheep across the east fork Carson River within the Campbell-Loope Allotment may affect LCT, but the shallow water used for tailing is an unlikely place for trout to occur. This activity will occur twice per year, will be short in duration at each crossing event, and will occur outside of spawning season. Alt 1 may affect but is not likely to adversely affect LCT. Close coordination with USFWS and CDFW has been ongoing during the planning process.
Priority will be given to upgrading existing range structural improvements. Noxious farm weeds will be controlled.	IV-87	Yes	Under the Proposed Action, upgrading the structural improvements to 2 water developments within Leviathan and 3 water developments within Campbell-

			Loope will occur. Design features included in the Proposed Action will minimize the spread of noxious farm weeds, in addition to an active treatment program on the Carson Ranger District. Alt.2- would not authorize domestic livestock grazing in the project area.
Proposed and Probable Management Practices			
Management Area 3 Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Cultural Resources	IV-88		
Protect the integrity of the Woodfords Cemetery as a Native American Site.	IV-88	N/A	
Recreation	IV-88		
Protect the integrity of the Woodfords Cemetery as a Native American Site.	IV-88	N/A	
Protect the proposed Faith Valley Campground from damaging activities.	IV-88	N/A	
Coordinate with Alpine County to encourage retaining Hope Valley's natural conditions and values. Utilize zoning and acquisition as primary methods to accomplish this.	IV-88	N/A	
Reduce recreation and range conflicts at Noble Lake.	IV-93	N/A	
Wilderness	IV-89		
Protect wilderness characteristics of the portion of the Carson-Iceberg not recommended for wilderness until Congress acts on the report for the entire area.	IV-89	N/A	
Wildlife	IV-90		
Protect the sensitive plant community on and near Freel Peak.	IV-90	N/A	
Cooperate with the California Department of Fish and Game in securing and maintaining conservation pools in as many of the small reservoirs along the Sierra Crest as possible.	IV-90	Yes	Alternative 1-Close coordination with CDFW, NDOW, and FWS regarding LCT, sage grouse, desert bighorn sheep, Sierra Nevada bighorn sheep, and mule deer has occurred throughout the planning process.

			Alternative 2- Ongoing coordination with state and federal wildlife agencies would continue
Manage the 5,488 acre Barber Peak area to protect this critical deer winter range. This includes allocating all forage to wildlife. Cooperate with the US Fish and Wildlife Service in predator control to minimize effects on wintering big game herds.	IV-90	N/A	Barber Peak is located within the Barber Allotment. Alt. 1- Barber Allotment will be closed to livestock grazing. Alt. 2- the Barber Allotment will remain vacant with no livestock grazing
Manage spotted owl habitat per habitat capability models in the document "Northeast Zone Habitat Capability Models and Special Habitat Criteria."	IV-90	N/A	Spotted owls not known to occur in the area
Range	IV-90		
Promote continuance of private land grazing permits in the Hope Valley area.	IV-90	N/A	
Manage livestock in Noble Canyon to minimize conflicts with Pacific Crest National Scenic Trail users.	IV-93	N/A	
Water & Soil	IV-91		
Protect Leviathan Mine site from activities that will be adverse to revegetation and maintenance of improvements.	IV-91	N/A	
Continue to manage the Musser-Jarvis watershed as follows: allow no livestock grazing, nor road or trail construction and no timber production.	IV-91 and FP Amend. 3	NA	

Management Area #5 Existing Wilderness

Total Management Area Direction			
Management Area Direction	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Management emphasis will be directed toward meeting objectives and intent of the Wilderness Act.	IV-107	Yes	Although grazing is an appropriate use within Wilderness, the Proposed Action will adjust the Campbell-Loope allotment boundary to exclude wilderness from domestic livestock grazing. Alt. 2- No domestic livestock grazing would occur.

Wilderness will be managed to provide outstanding opportunities for solitude, physical and mental challenge' primitive recreation, and to maintain wilderness characteristics of the land.	IV-107		Under both Alternatives, no domestic livestock grazing will occur within the Mokelumne Wilderness.
Continuity and consistency of management decisions will be maintained among the separate authorities administering different portions of the same wilderness.	IV-107	N/A	
Paiute cutthroat trout will have the highest priority in Silver King, Coyote Valley, and Corral Valley, and will be managed to provide for recovery as per the Paiute Recovery plan. All conflicts will be mitigated or eliminated.	IV-107	N/A	PCT do not occur within the project area
Lahontan cutthroat trout habitat will be enhanced. Cooperation with the California Department of Fish and Game, and the US Fish and Wildlife Service will serve to maintain and increase populations.	IV-107	Yes	Alternative 1-Under the Proposed Action informal consultation occurred with FWS for the LCT occupied habitat along the east fork Carson River. Proper use criteria and design features would protect habitat for LCT. However, LCT do not occur within the Mokelumne Wilderness within the project area. Alternative 2- Under the No-Action alternative, no live-stock grazing would occur. LCT would remain undisturbed from livestock grazing and habitat will continue to move toward DFC
Proposed and Probable Management Practices			
Management Area 5 Direction	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Wildlife	IV-109		
Maintain and improve Paiute cutthroat trout habitat in Silver King, Coyote Valley, and Corral Valley. Paiute cutthroat trout will have the highest priority in these areas and will be managed to provide for recovery. All conflicts will be mitigated. Improve fishery habitat to good condition in all other portions of the area.	IV-109	N/A	PCT do not occur within the project area.
As opportunities arise, coordinate with the California Department of Fish and Game, and provide	IV-109	N/A	Alternative 1-Coordination with Nevada Department of Wildlife, California Department of Fish and Wildlife, and

reintroduction of California bighorn sheep and peregrine falcon in Mono County.			US Fish and Wildlife Service has occurred during the planning process for the Leviathan-Loope Range project. The FS engaged in informal consultation with FWS and provided a concurrence letter for LCT. However, LCT do not occur within the wilderness area included in this project. District will continue to coordinate with Agencies. Alternative 2- Under the No-Action alternative, no live-stock grazing would occur. District will continue to coordinate with state Agencies
Range	IV-109		
Coordinate livestock trailing with adjacent National Forest allotments.	IV-109	No	Livestock will not be authorized to trail or graze on adjacent National Forests, however, coordination with BLM will occur in order to cross the east fork Carson River.
Livestock grazing operations, where established prior to designation of wilderness, shall, pursuant to Sec. 4(d) (4) (2) of the Wilderness Act, be permitted to continue, subject to provisions of 36 CFR 293. "Committee Guidelines and Policies Regarding Grazing in National Forest Wilderness Areas" (H.R. Report No. 96-1126, dated 6/24/80) will be applied in a practical, reasonable, and uniform manner in all National Forest wildernesses. These guidelines and policies are applicable only to livestock grazing operations.	IV-109-110	Yes	Alt. 1- would adjust the Campbell-Loope allotment boundary and remove domestic livestock grazing from the portion of the Mokelumne Wilderness. The lands are largely inaccessible by livestock with little forage capability. Alt. 2- would not authorize domestic livestock grazing.
Permit motorized access and uses for livestock management in the Wolf Creek drainage that existed prior to wilderness designation and in accordance with direction in the 1984 California Wilderness Act.	IV-110	N/A	
Continue the administrative grazing closure of identified allotments to protect soil and water resources.	IV-110	Yes	Alt. 1- would close 3 grazing allotments to domestic livestock grazing Alt. 2- would not authorize domestic livestock grazing on 5 allotments
Water & Soil	IV-110		

Implement measures to protect and rehabilitate streams and lakesides that have been adversely affected by human use.	IV-110	Yes	Alt. 1 - design features such as no concentrated use in riparian areas, will help maintain watershed improvements in addition to 20% Streambank alteration. Alt 2 – No grazing will be permitted in the project area.

Amendment 3 (1995)
Toiyabe Forest Plan
Musser-Jarvis Municipal Watershed
Management Area 3 (Alpine)

Replaced language in direction in Management Area 3 regarding the Musser-Jarvis Municipal Watershed. The amendment addressed the prohibition of timber cutting in the management area direction and the bark beetle infestation and fuel build up near private property. The amendment replaced the following direction:

> Continue to manage the Musser-Jarvis municipal watershed as follows: allow no livestock grazing, no road or trail construction, and no timber cutting.

with

> Continue to manage the Musser-Jarvis Municipal watershed as follows: allow no livestock grazing, nor road or trail construction and no timber production'. (See definitions in glossary of LAMP).

2001 ROD for the Sierra Nevada Forest Plan Amendment (Framework)
As amended by the 2004 for the Sierra Nevada Forest Plan Amendment (Framework)

A. Management Goals and Strategies

Aquatic, Riparian, and Meadow Ecosystems and Associated Species

Aquatic, Riparian, and Meadow Ecosystems and Associated Species - Goals			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Water Quality: Maintain and restore water quality to meet goals of the Clean Water Act and Safe Drinking Water Act, providing water that is fishable, swimmable, and suitable for drinking after normal treatment.	32 of 2004 ROD	Yes	Alt 1. – Implementation of proper use criteria and project design features would maintain water quality. Alt. 2 – No Grazing Alternative. Water quality would not be impacted by livestock use.
Species Viability: Maintain and restore habitat to support viable populations of native and desired non-native plant, invertebrate, and vertebrate riparian-dependent species. Prevent new introductions of invasive species. Where invasive species are adversely affecting the viability of native species, work cooperatively with appropriate State and Federal wildlife agencies to reduce impacts to native populations.	32 of 2004 ROD	yes	Alternative 1-The project is designed to minimize disturbance to TES species and their habitat. Based on the effects analysis conducted for TES and MIS species, the Proposed Action would result in minimal impacts to individuals but would not impact population viability or result in a downward trend of populations or habitat. Alternative 2- Under the No-Action alternative, no live-stock grazing would occur. There would be no disturbance to habitat for wildlife from livestock grazing.
Plant and Animal Community Diversity: Maintain and restore the species composition and structural diversity of plant and animal communities in riparian areas, wetlands, and meadows to provide desired habitats and ecological functions.	32 of 2004 ROD	yes	Alternative 1-The project is designed to minimize disturbance to TES species and their habitat. Based on the effects analysis conducted for TES and MIS species, the Proposed Action will result in minimal impacts to individuals but will not impact diversity of wildlife populations or wildlife habitat.

			Alternative 2- No livestock grazing would occur. Existing population and habitat diversity would not be altered from livestock grazing.
Special Habitats: Maintain and restore the distribution and health of biotic communities in special aquatic habitats (such as springs, seeps, vernal pools, fens, bogs, and marshes) to perpetuate their unique functions and biological diversity.	32 of 2004 ROD	yes	Alternative 1-Under the Proposed Action, all habitat groups will be moved toward a more functioning (satisfactory) ecological condition. There are no known occurrences of Sensitive plants within the project area. However, suitable habitat is present. Design features associated with the Proposed Action would include avoiding rare plant populations if they are discovered in the future. Proper use and design criteria would move the ecological condition of springs and seeps toward PFC. Alternative 2-No livestock grazing would occur. No disturbance to rare plants or special plant communities would occur from livestock grazing.
Watershed Connectivity: Maintain and restore spatial and temporal connectivity for aquatic and riparian species within and between watersheds to provide physically, chemically and biologically unobstructed movement for their survival, migration and reproduction.	32 of 2004 ROD	N/A	
Floodplains and Water Tables: Maintain and restore the connections of floodplains, channels, and water tables to distribute flood flows and sustain diverse habitats.	32 of 2004 ROD	Yes	Alt. 1 – Proper use criteria for riparian vegetation and streambank disturbance, and project design features would minimize impacts to riparian vegetation and stream channel stability. Distribution of flood flows and diverse habitats would be maintained. Alt. 2 – No impacts from livestock use.
Watershed Condition: Maintain and restore soils with favorable infiltration characteristics and diverse vegetative cover to absorb and filter precipitation and to sustain favorable conditions of stream flows.	32 of 2004 ROD	Yes	Alt. 1 – Proper use criteria and project design features would allow for slow recovery of bare ground and compaction. Concentrated use areas would not show recovery. Alt 2 – No impacts from livestock grazing on soil quality.

Streamflow Patterns and Sediment Regimes: Maintain and restore in-stream flows sufficient to sustain desired conditions of riparian, aquatic, wetland, and meadow habitats and keep sediment regimes as close as possible to those with which aquatic and riparian biota evolved.	33 of 2004 ROD	Yes	Alt. 1 – Instream flows would be maintained. Existing and new water developments would be utilized. Alt. 2 – Instream flows would be maintained. Water developments would no longer be maintained.
Stream Banks and Shorelines: Maintain and restore the physical structure and condition of stream banks and shorelines to minimize erosion and sustain desired habitat diversity.	33 of 2004 ROD	Yes	Alt. 1 – Riparian vegetation utilization standard, streambank disturbance standards and project design features would maintain streambank stability and minimize erosion. Alt. 2 – No impacts from livestock use on streams.
Aquatic, Riparian, and Meadow Ecosystems and Associated Species – Objectives			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Riparian Conservation Objective #1: Ensure that identified beneficial uses for the water body are adequately protected. Identify the specific beneficial uses for the project area, water quality goals from the Regional Basin Plan, and the manner in which the standards and guidelines will protect the beneficial uses.	33 of 2004 ROD	Yes	Alt 1 – Beneficial uses and water quality objectives for streams in California and Nevada are identified. Beneficial uses protected through implementation of proper use criteria and project design features.
Riparian Conservation Objective #2: Maintain or restore: (1) the geomorphic and biological characteristics of special aquatic features, including lakes, meadows, bogs, fens, wetlands, vernal pools, springs; (2) streams, including in stream flows; and (3) hydrologic connectivity both within and between watersheds to provide for the habitat needs of aquatic-dependent species.	33 of 2004 ROD	NA	Outside the scope of this project.
Riparian Conservation Objective #3: Ensure a renewable supply of large down logs that: (1) can reach the stream channel and (2) provide suitable habitat within and adjacent to the RCA.	33 of 2004 ROD	NA	Outside the scope of this project.
Riparian Conservation Objective #4: Ensure that management activities, including fuels reduction actions, within RCAs and CARs enhance or maintain physical and	33 of 2004 ROD	Yes	Alt. 1 – Utilization standards for riparian vegetation, streambank disturbance standard and no concentrated livestock use within .25 miles of a

biological characteristics associated with aquatic- and riparian-dependent species.			waterbody would maintain physical and biological characteristics. Alt. 2 – No impacts from livestock use.
Riparian Conservation Objective #5: Preserve, restore, or enhance special aquatic features, such as meadows, lakes, ponds, bogs, fens, and wetlands, to provide the ecological conditions and processes needed to recover or enhance the viability of species that rely on these areas.	33 of 2004 ROD	Yes	Alt 1. There are no fens within the project area. The Mud Lake Allotment contains a 20-acre wetland, which would be closed. Impacts to springs in the project area would be minimized by implementation of the riparian vegetation utilization standards and project design features eliminating concentrated livestock use within .25 miles of a waterbody, including springs. Alt. 2 – No impact from livestock under this alternative.
Riparian Conservation Objective #6: Identify and implement restoration actions to maintain, restore or enhance water quality and maintain, restore, or enhance habitat for riparian and aquatic species.	34 of 2004 ROD	NA	Outside the scope of this project.

Noxious Weed Management

Noxious Weed Management - Goals			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Goals for noxious weed management are to manage weeds using an integrated weed management approach according to the priority set forth in FSM 2081.2: • **Priority 1.** Prevent the introduction of new invaders. • **Priority 2.** Conduct early treatment of new infestations. • **Priority 3.** Contain and control established infestations.	36 of 2004 ROD	Yes	Alt 1.- Design features and the proper use criteria would improve the ecological condition of most habitat groups reducing the potential for noxious weed invasion. Design features would minimize the potential for inadvertent transport of weed seed from livestock and equipment. Monitoring for noxious weeds and noxious weed treatments would continue within the project area. Alt.2- would not authorize livestock grazing. Early treatment and monitoring would continue to occur and Established infestations would continue to be contained/ controlled.

B. Land Allocations and Desired Conditions

Wilderness Areas and Wild and Scenic Rivers

Wilderness Areas and Wild and Scenic Rivers – Desired Future Condition (DFC)			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Wilderness is a unique and vital resource. It is an area where the earth and its community of life are untrammeled by humans, where humanity itself is a visitor who does not remain. It retains its primeval character and influence, without permanent improvements or human habitation. Natural conditions are protected and preserved. Consistent with the National Fire Plan's goal for restoring fire-adapted ecosystems, fire is restored as a natural process through wildland fire use. The area generally appears to have been affected primarily by the forces of nature, with the imprint of humanity's work substantially unnoticeable. It offers outstanding opportunities for solitude, or a primitive and unconfined type of recreation. Human influence does not impede or interfere with natural succession in the ecosystems. The outstandingly remarkable values for which wild and scenic rivers have been established, are candidates for designation, or are under study, are protected and preserved for the benefit and enjoyment of present and future generations. Free-flowing conditions of wild and scenic rivers, candidate or study rivers, are preserved. Human influence may be evident, but does not interfere with, or impede the natural succession of river ecosystems.	36-37 of 2004 ROD		
Wilderness Areas and Wild and Scenic Rivers - Designation			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance

Wilderness Areas and Wild and Scenic River Areas exist as designated by Congress.	36 of 2004 ROD		

California Spotted Owl Protected Activity Centers (PACs)

California Spotted Owl Protected Activity Centers (PACs) – Desired Future Condition (DFC)			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Stands in each PAC have: (1) at least two tree canopy layers; (2) dominant and co-dominant trees with average diameters of at least 24 inches dbh; (3) at least 60 to70 percent canopy cover; (4) some very large snags (greater than 45 inches dbh); and (5) snag and down woody material levels that are higher than average.	37 of 2004 ROD	N/A	No PACS are located in project area.

California Spotted Owl Home Range Core Areas (HRCAs)

California Spotted Owl Home Range Core Areas (HRCAs) – Desired Future Condition (DFC)			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
HRCAs consist of large habitat blocks that have: (1) at least two tree canopy layers; (2) at least 24 inches dbh in dominant and co-dominant trees; (3) a number of very large (greater than 45 inches dbh) old trees; (4) at least 50 to 70 percent canopy cover; and (5) higher than average levels of snags and down woody material.	40 of 2004 ROD	N/A	No HRCAs have been designated in the project area.

Northern Goshawk Protected Activity Centers (PACs)

Northern Goshawk Protected Activity Centers (PACs) – Desired Future Condition (DFC)			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC

Stands in each PAC have: (1) at least two tree canopy layers; (2) dominant and co-dominant trees with average diameters of at least 24 inches dbh; (3) at least 60 to70 percent canopy cover; (4) some very large snags (greater than 45 inches dbh); and (5) snag and down woody material levels that are higher than average.	38 of 2004 ROD	Yes	There are no goshawk or spotted owl PACs in the project area. However, potential habitat for goshawks and goshawk activity has been detected in the Campbell Loope Allotment. There will be no effect on habitat quality for goshawks or spotted owls under Alternative 1 (Proposed Action) or Alternative 2 (No Action)

Great Gray Owl Protected Activity Centers (PACs)

Great Gray Owl Protected Activity Centers (PACs) – Desired Future Condition (DFC)			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Meadow vegetation in great gray owl PACs supports a sufficiently large meadow vole population to provide a food source for great gray owls through the reproductive period.	39 of 2004 ROD	N/A	There are no PACs in the project area.

Forest Carnivore Den Site Buffers

Forest Carnivore Den Site Buffers – Desired Future Condition (DFC)			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Areas surrounding fisher den sites include at least two large (greater than 40 inches dbh) conifers per acre, and one or more oaks (greater than 20 inches dbh) per acre with suitable denning cavities. Canopy closure exceeds 80 percent. Areas surrounding marten den sites have (1) at least two conifers per acre greater than 24 inches dbh with suitable denning cavities, (2) canopy closures exceeding 60 percent, (3) more than 10 tons per acre of coarse woody debris in	39 of 2004 ROD	N/A	There are no Forest carnivore den site buffers in the project area.

decay classes 1 and 2, and (4) an average of 6 snags per acre on the westside and 3 per acre on the eastside.			

Southern Sierra Fisher Conservation Area

Southern Sierra Fisher Conservation Area – Desired Future Condition (DFC)			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Within known or estimated female fisher home ranges outside the WUI, a minimum of 50 percent of the forested area has at least 60 percent canopy cover. Where home range information is lacking, use HUC 6 watershed as the analysis area for this desired condition.	41 of 2004 ROD	N/A	There are not southern Sierra fisher conservation areas in the project area.
Southern Sierra Fisher Conservation Area - Goals			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
The southern Sierra fisher conservation area encompasses the known occupied range of the Pacific fisher in the Sierra Nevada. The southern Sierra fisher conservation area is shown on the Modified Alternative 8 map included in the FEIS	41 of 2004 ROD	N/A	There are not southern Sierra fisher conservation areas in the project area.

Riparian Conservation Areas

Riparian Conservation Areas – Desired Future Condition (DFC)			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Water quality meets the goals of the Clean Water Act and Safe Drinking Water Act; it is fishable, swimmable, and suitable for drinking after normal treatment. Habitat supports viable populations of native and desired non-native plant, invertebrate, and vertebrate riparian and aquatic-dependent species. New introductions of invasive	42-43 of 2004 ROD	Yes	Desired conditions for riparian conservation areas are addressed in the EA and specialist reports (fisheries/aquatics, vegetation, watershed).

species are prevented. Where invasive species are adversely affecting the viability of native species, the appropriate State and Federal wildlife agencies have reduced impacts to native populations. Species composition and structural diversity of plant and animal communities in riparian areas, wetlands, and meadows provide desired habitat conditions and ecological functions. The distribution and health of biotic communities in special aquatic habitats (such as springs, seeps, vernal pools, fens, bogs, and marshes) perpetuates their unique functions and biological diversity. Spatial and temporal connectivity for riparian and aquatic-dependent species within and between watersheds provides physically, chemically and biologically unobstructed movement for their survival, migration and reproduction. The connections of floodplains, channels, and water tables distribute flood flows and sustain diverse habitats. Soils with favorable infiltration characteristics and diverse vegetative cover absorb and filter precipitation and sustain favorable conditions of stream flows. In-stream flows are sufficient to sustain desired conditions of riparian, aquatic, wetland, and meadow habitats and keep sediment regimes as close as possible to those with which aquatic and riparian biota evolved. The physical structure and condition of stream banks and shorelines minimizes erosion and sustains desired habitat diversity. The ecological status of meadow vegetation is late seral (50 percent or more of the relative cover of the herbaceous layer is late seral with high similarity to the potential natural community). A diversity of age classes of hardwood shrubs is present and regeneration is occurring.			

Meadows are hydrologically functional. Sites of accelerated erosion, such as gullies and headcuts are stabilized or recovering. Vegetation roots occur throughout the available soil profile. Meadows with perennial and intermittent streams have the following characteristics: (1) stream energy from high flows is dissipated, reducing erosion and improving water quality, (2) streams filter sediment and capture bedload, aiding floodplain development, (3) meadow conditions enhance floodwater retention and groundwater recharge, and (4) root masses stabilize stream banks against cutting action.			
Riparian Conservation Areas - Designation			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Riparian conservation area (RCA) widths are described below. RCA widths shown below may be adjusted at the project level if a landscape analysis has been completed and a site-specific RCO analysis demonstrates a need for different widths. **Perennial Streams:** 300 feet on each side of the stream, measured from the bank full edge of the stream **Seasonally Flowing Streams (includes intermittent and ephemeral streams):** 150 feet on each side of the stream, measured from the bank full edge of the stream **Streams in Inner Gorge[1]:** top of inner gorge **Special Aquatic Features[2] or Perennial Streams with Riparian Conditions extending more than 150 feet from edge of streambank or Seasonally Flowing streams with riparian conditions extending more**	42 of 2004 ROD	N/A	N/A

than 50 feet from edge of streambank: 300 feet from edge of feature or riparian vegetation, whichever width is greater **Other hydrological or topographic depressions without a defined channel:** RCA width and protection measures determined through project level analysis.			

Critical Aquatic Refuges

Critical Aquatic Refuges – Desired Future Condition (DFC)			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Critical aquatic refuges provide habitat for native fish, amphibian and aquatic invertebrate populations. Remnant plant and animal populations in aquatic communities are maintained and restored. Streams in meadows, lower elevation grasslands, and hardwood ecosystems have vegetation and channel bank conditions that approach historic potential. Water quality meets State stream standards.	44 of 2004 ROD	N/A	No CAR located within the project area
Critical Aquatic Refuges - Designation			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
Critical aquatic refuges (CARs) are subwatersheds, generally ranging between 10,000 to 40,000 acres, with some as small 500 acres and some as large as 100,000 acres, that contain either: • known locations of threatened, endangered, or sensitive species, • highly vulnerable populations of native plant or animal species, or	43 of 2004 ROD	N/A	N/A

• localized populations of rare native aquatic- or riparian-dependent plant or animal species. Critical aquatic refuges are shown on maps in Volume 4, Appendix I of the SNFPA FEIS (January 2001), beginning on page I-53. The boundaries of CARs may be refined during landscape analysis based on the findings from conservation assessments or verification of the presence and condition of habitat for threatened, endangered, and sensitive species. Additional CARs may be added by individual national forests.			

D. Management Standards and Guidelines

Forest-wide Standards and Guidelines

Standards and guidelines described in this section apply to all land allocations (other than wilderness areas and wild and scenic river areas) unless stated otherwise.

Wolverine and Sierra Nevada Red Fox Detections			
Sierra Nevada Forest Plan Amendment Forestwide S&Gs	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
32. Detection of a wolverine or Sierra Nevada red fox will be validated by a forest carnivore specialist. When verified sightings occur, conduct an analysis to determine if activities within 5 miles of the detection have a potential to affect the species. If necessary, apply a limited operating period from January 1 to June 30 to avoid adverse impacts to potential breeding. Evaluate activities for a 2-year period for detections not associated with a den site.	54 of 2004 ROD	N/A	Sierra Nevada red foxes (SNRF) are known to occur on the adjacent Bridgeport Ranger District. SNRF are not known to occur in the project area. SNRF prefer high elevation (above 10,000 feet) alpine environments which are not present within the proposed project area. No verified accounts of wolverines occur in the project area.
California Spotted Owl Surveys			

Sierra Nevada Forest Plan Amendment Forestwide S&Gs	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
33. Conduct surveys in compliance with the Pacific Southwest Region's survey protocols during the planning process when proposed vegetation treatments are likely to reduce habitat quality in suitable California spotted owl habitat with unknown occupancy. Designate California spotted owl protected activity centers (PACs) where appropriate based on survey results.	54 of 2004 ROD	N/A	This is not a vegetation treatment project.
Northern Goshawk Surveys			
Sierra Nevada Forest Plan Amendment Forestwide S&Gs	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
34. Conduct surveys in compliance with the Pacific Southwest Region's survey protocols during the planning process when vegetation treatments are likely to reduce habitat quality are proposed in suitable northern goshawk nesting habitat that is not within an existing California spotted owl or northern goshawk PAC. Suitable northern goshawk nesting habitat is defined based on the survey protocol.	54 of 2004 ROD	N/A	This is not a vegetation treatment project.
Great Gray Owl Surveys			
Sierra Nevada Forest Plan Amendment Forestwide S&Gs	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
35. Conduct additional surveys to established protocols to follow up reliable sightings of great gray owls.	54 of 2004 ROD	yes	Surveys have been conducted.
Noxious Weeds Management			
Sierra Nevada Forest Plan Amendment Forestwide S&Gs	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance

36. Inform forest users, local agencies, special use permittees, groups, and organizations in communities near national forests about noxious weed prevention and management.	54 of 2004 ROD	Yes	Under the Proposed Action, 2 Allotment Management Plans, 2 grazing permits, and Annual Operating Instructions will be issued which will address Noxious weeds within the allotments. The grazing permittee's will be educated on which weeds are known to occur on which grazing allotments.
37. Work cooperatively with California and Nevada State agencies and individual counties (for example, Cooperative Weed Management Areas) to: (1) prevent the introduction and establishment of noxious weed infestations and (2) control existing infestations.	54 of 2004 ROD	N/A	The District coordinates with Alpine County Weed Management Area personnel annually on known infestations.
38. As part of project planning, conduct a noxious weed risk assessment to determine risks for weed spread (high, moderate, or low) associated with different types of proposed management activities. Refer to weed prevention practices in the Regional Noxious Weed Management Strategy to develop mitigation measures for high and moderate risk activities.	55 of 2004 ROD	yes	Noxious weeds risk assessment prepared and in project record.
39. When recommended in project-level noxious weed risk assessments, consider requiring off-road equipment and vehicles (both Forest Service and contracted) used for project implementation to be weed free. Refer to weed prevention practices in the Regional Noxious Weed Management Strategy.	55 of 2004 ROD	yes	Under the Proposed Action a backhoe will be used for range developments maintenance and construction within the Leviathan and Campbell-Loope Allotments. The backhoe will be required to come to the project area "free of noxious weed seeds." Alt.2- would not authorize livestock grazing, and no backhoe use.
40. Minimize weed spread by incorporating weed prevention and control measures into ongoing management or maintenance activities that involve ground disturbance or the possibility of spreading weeds. Refer to weed prevention practices in the Regional Noxious Weed Management Strategy.	55 of 2004 ROD	Yes	Under the Proposed Action a backhoe will be used for range developments maintenance and construction within the Leviathan and Campbell-Loope Allotments. The backhoe will be required to come to the project area "free of noxious weed seeds." Project design features minimize the spread of noxious weeds.

			Alt.2- would not authorize livestock grazing, and no backhoe use.
41. Conduct follow-up inspections of ground disturbing activities to ensure adherence to the Regional Noxious Weed Management Strategy.	55 of 2004 ROD	Yes	Under the Proposed Action follow-up inspections would occur at range development locations. Alt.2- would not authorize livestock grazing, and no backhoe use.
42. Encourage use of certified weed free hay and straw. Cooperate with other agencies and the public in developing a certification program for weed free hay and straw. Phase in the program as certified weed free hay and straw becomes available. This standard and guideline applies to pack and saddle stock used by the public, livestock permittees, outfitter guide permittees, and local, State, and Federal agencies.	55 of 2004 ROD	Yes	Under the Proposed Action this will be included in the Annual Operating Instructions given to the permittee. Alt.2- would not authorize domestic livestock grazing and associated impacts in the project area.
43. Include weed prevention measures, as necessary, when amending or re-issuing permits (including, but not limited to, livestock grazing, special uses, and pack stock operator permits).	55 of 2004 ROD	Yes	Under the Proposed Action, specific design features relating to noxious weeds and their spread are included. Alt.2- would not authorize domestic livestock grazing and associated impacts in the project area.
46. Consult with American Indians to determine priority areas for weed prevention and control where traditional gathering areas are threatened by weed infestations.	55 of 2004 ROD	N/A	Tribal consultation occurs annually surrounding Big Springs.
47. Complete noxious weed inventories, based on regional protocol. Review and update these inventories on an annual basis.	55 of 2004 ROD	Yes	This occurs annually within the Carson Ranger District.
48. outlined in the Regional Noxious Weed Management Strategy, when new, small weed infestations are detected, emphasize eradication of these infestations while providing for the safety of field personnel.	55 of 2004 ROD	Yes	This occurs annually within the Carson Ranger District and included in cumulative effects.

49. Routinely monitor noxious weed control projects to determine success and to evaluate the need for follow-up treatments or different control methods. Monitor known weed infestations, as appropriate, to determine changes in weed population density and rate of spread.	55 of 2004 ROD	Yes	Monitoring occurs annually within the Carson Ranger District.
Grazing			
Sierra Nevada Forest Plan Amendment Forestwide S&Gs	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
50. To protect hardwood regeneration in grazing allotments, allow livestock browse on no more than 20 percent of annual growth of hardwood seedlings and advanced regeneration. Modify grazing plans if hardwood regeneration and recruitment needs are not being met.	55 of 2004 ROD	N/A	There are no hardwood stands in the project area. Hardwood is found on west side of Sierra Nevada.
51. Grazing utilization in annual grasslands will maintain a minimum of 60 percent cover. Where grasslands are in satisfactory condition and annual precipitation is greater than 10 inches, manage for 700 pounds residual dry matter (RDM) per acre. Where grasslands are in satisfactory condition and annual precipitation is less than 10 inches, manage for 400 pounds RDM per acre. Where grasslands are in unsatisfactory condition and annual precipitation is greater than 10 inches, manage for 1,000 pounds RDM per acre; manage for 700 pounds RDM per acre where grasslands are in unsatisfactory condition and precipitation is less than 10 inches. Adjust these standards, as needed, based on grassland condition. This standard and guideline only applies to grazing utilization.	56 of 2004 ROD	N/A	There are no annual grasslands in the project area. Annual grasslands are found on west side of Sierra Nevada.

52. Where professional judgment and quantifiable measurements find that current practices are maintaining range in good to excellent condition, the grazing utilization standards above may be modified to allow for the Forest Service, in partnership with individual permittees, to rigorously test and evaluate alternative standards.	56 of 2004 ROD	N/A	Grazing standards listed above are not applicable to the project area.
Yosemite Toad			
Sierra Nevada Forest Plan Amendment Forestwide S&Gs	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
53. Exclude livestock from standing water and saturated soils in wet meadows and associated streams and springs occupied by Yosemite toads or identified as "essential habitat" in the conservation assessment for the Yosemite toad during the breeding and rearing season (through metamorphosis). Wet meadow habitat for Yosemite toads is defined as relatively open meadows with low to moderate amounts of woody vegetation that have standing water on June 1 or for more than 2 weeks following snow melt. Specific breeding and rearing season dates will be determined locally. If physical exclusion of livestock is impractical, then exclude grazing from the entire meadow. This standard does not apply to pack and saddle stock.	56 of 2004 ROD	No	There is no suitable habitat for YT within the project area.
54. Exclusions in standard and guideline #53 above may be waived if an interdisciplinary team has developed a site-specific management plan to minimize impacts to the Yosemite toad and its habitat by managing the movement of stock around wet areas. Such plans are to include a requirement for systematically monitoring a sample of occupied Yosemite toad sites within the	56 of 2004 ROD	N/A	There is no suitable habitat for YT within the project area.

meadow to: (1) assess habitat conditions and (2) assess Yosemite toad occupancy and population dynamics. Every 3 years from the date of the plan, evaluate monitoring data. Modify or suspend grazing if Yosemite toad conservation is not being accomplished. Plans must be approved by the authorized officer and incorporated into all allotment plans and/or special use permits governing use within the occupied habitat.			
55. Complete one survey cycle in suitable habitat for the Yosemite toad within this species' historic range to determine presence of Yosemite toads.	56 of 2004 ROD	N/A	There is no suitable habitat for YT within the project area.
Willow Flycatcher			
Sierra Nevada Forest Plan Amendment Forestwide S&Gs	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
57. In meadows with **occupied willow flycatcher sites**, allow only late-season grazing (after August 15) in the entire meadow.	58 of 2004 ROD	N/A	There are no occupied sites in the project area.
58. Standard and guideline #57 above may be waived if an interdisciplinary team has developed a site-specific meadow management strategy. This strategy is to be developed and implemented in partnership with the affected grazing permittee. The strategy objectives must focus on protecting the nest site and associated habitat during the breeding season and the long-term sustainability of suitable habitat at breeding sites. It may use a mix of management tools, including grazing systems, structural improvements, and other exclusion by management techniques to protect willow flycatcher habitat.	58 of 2004 ROD	N/A	There are no occupied sites in the project area.
59. In willow flycatcher sites receiving late-season grazing, monitor utilization annually using regional range analysis and planning guide. Monitor willow flycatcher habitat every 3 years	58 of 2004 ROD	N/A	There are no occupied sites in the project area.

using the following criteria: rooting depth cores for meadow condition, point intercepts for shrub foliar density, and strip transects for shrub recruitment and cover. Meadow condition assessments will be included in a GIS meadow coverage. If habitat conditions are not supporting the willow flycatcher or trend downward, modify or suspend grazing.			
60. For **historically occupied willow flycatcher sites**, assess willow flycatcher habitat suitability within the meadow. If habitat is degraded, develop restoration objectives and take appropriate actions (such as physical restoration of hydrological components, limiting or re-directing grazing activity, and so forth) to move the meadow toward desired conditions.	58 of 2004 ROD	N/A	There are no historically occupied sites in the project area.
62. As part of the project planning process, survey **emphasis habitat** within 5 miles of occupied willow flycatcher sites to determine willow flycatcher occupancy. Emphasis habitat is defined as meadows larger than 15 acres that have standing water on June 1 and a deciduous shrub component. Use established protocols to conduct these surveys. If these surveys determine willow flycatcher occupancy, add these to the database of occupied willow flycatcher sites and include them in the 4-year survey cycle of willow flycatcher sites described above.	58 of 2004 ROD	N/A	There are no occupied sites in the project area.
63. Evaluate proposals for new concentrated stock areas (for example, livestock handling and management facilities, pack stations, equestrian stations, and corrals) located within 5 miles of occupied willow flycatcher sites.	58 of 2004 ROD	N/A	There are no occupied sites in the project area.

Wheeled Vehicles			
Sierra Nevada Forest Plan Amendment Forestwide S&Gs	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
69. Prohibit wheeled vehicle travel off of designated routes, trails, and limited off highway vehicle (OHV) use areas. Unless otherwise restricted by current forest plans or other specific area standards and guidelines, cross-country travel by over-snow vehicles would continue.	59 of 2004 ROD		Alt. 1- travel off designated routes occasionally occurs for maintenance of water developments, but occurrences are infrequent. This is also addressed in cumulative effects analysis.
Road Construction, Reconstruction, and Relocation			
Sierra Nevada Forest Plan Amendment Forestwide S&Gs	Location	Applicable	If Applicable, Where, Why and How Do You Implement and Show Compliance
70. To protect watershed resources, meet the following standards for road construction, road reconstruction, and road relocation: (1) design new stream crossings and replacement stream crossings for at least the 100-year flood, including bedload and debris; (2) design stream crossings to minimize the diversion of streamflow out of the channel and down the road in the event of a crossing failure; (3) design stream crossings to minimize disruption of natural hydrologic flow paths, including minimizing diversion of streamflow and interception of surface and subsurface water; (4) avoid wetlands or minimize effects to natural flow patterns in wetlands; and (5) avoid road construction in meadows.	59 of 2004 ROD	No	No road construction is proposed within the Leviathan-Loope Rangeland Project.

Standards and Guidelines for California Spotted Owl and Northern Goshawk Protected Activity Centers

California Spotted Owl and Northern Goshawk Protected Activity Centers – Standards and Guidelines (S&Gs)

Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
Looks like all the S&Gs related to vegetation treatment and grazing does not fit that definition in the glossary 82. Mitigate impacts where there is documented evidence of disturbance to the nest site from existing recreation, off highway vehicle route, trail, and road uses (including road maintenance). Evaluate proposals for new roads, trails, off highway vehicle routes, and recreational and other developments for their potential to disturb nest sites.	60-61 of 2004 ROD	Yes	Addressed in cumulative effects analysis

Standards and Guidelines for Great Gray Owl Protected Activity Centers

Great Gray Owl Protected Activity Centers – Standards and Guidelines (S&Gs)			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
84. In meadow areas of great gray owl PACs, maintain herbaceous vegetation at a height commensurate with site capability and habitat needs of prey species. Follow regional guidance to determine potential prey species and associated habitat requirements at the project level.	61 of 2004 ROD	No	No great gray owls within the project area

Standards and Guidelines for Riparian Conservation Areas and Critical Aquatic Refuges

Riparian Conservation Areas and Critical Aquatic Refuges – Standards and Guidelines (S&Gs)			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
91. Designate riparian conservation area (RCA) widths as described in Part B of this appendix. The RCA widths displayed in Part B may be adjusted	62 of 2004 ROD	Yes	RCA would be designated as described in Part B: 300 feet on each side of a perennial stream and 150 feet on each side of a seasonally stream.

at the project level if a landscape analysis has been completed and a site-specific RCO analysis demonstrates a need for different widths.			
92. Evaluate new proposed management activities within CARs and RCAs during environmental analysis to determine consistency with the riparian conservation objectives at the project level and the AMS goals for the landscape. Ensure that appropriate mitigation measures are enacted to (1) minimize the risk of activity-related sediment entering aquatic systems and (2) minimize impacts to habitat for aquatic- or riparian-dependent plant and animal species.	62 of 2004 ROD	No	No CAR located within the project area.
93. Identify existing uses and activities in CARs and RCAs during landscape analysis. At the time of permit reissuance, evaluate and consider actions needed for consistency with RCOs.	62 of 2004 ROD	No	No CAR located within the project area.
94. As part of project-level analysis, conduct peer reviews for projects that propose ground-disturbing activities in more than 25 percent of the RCA or more than 15 percent of a CAR.	62 of 2004 ROD	No	No CAR located within the project area.

Standards and Guidelines Associated with RCO #1

Riparian Conservation Objectives #1 – Standards and Guidelines (S&Gs)			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
95. For waters designated as "Water Quality Limited" (Clean Water Act Section 303(d)), participate in the development of Total Maximum Daily Loads (TMDLs) and TMDL Implementation Plans.	63 of 2004 ROD	NA	Development of TMDL outside the scope of this project.

Execute applicable elements of completed TMDL Implementation Plans.			
96. Ensure that management activities do not adversely affect water temperatures necessary for local aquatic- and riparian-dependent species assemblages.	63 of 2004 ROD	Yes	Alt. 1 – Proper use criteria for riparian herbaceous and woody vegetation would limit impacts to water temperature. Alt. 2 – Livestock use would not impact water temperatures.
97. Limit pesticide applications to cases where project level analysis indicates that pesticide applications are consistent with riparian conservation objectives.	63 of 2004 ROD	N/A	Project does not propose the use of pesticide.
98. Within 500 feet of known occupied sites for the California red-legged frog, Cascades frog, Yosemite toad, foothill yellow-legged frog, mountain yellow-legged frog, and northern leopard frog, design pesticide applications to avoid adverse effects to individuals and their habitats.	63 of 2004 ROD	N/A	Project does not propose the use of pesticide.
99. Prohibit storage of fuels and other toxic materials within RCAs and CARs except at designated administrative sites and sites covered by a Special Use Authorization. Prohibit refueling within RCAs and CARs unless there are no other alternatives. Ensure that spill plans are reviewed and up-to-date.	63 of 2004 ROD	N/A	

Standards and Guidelines Associated with RCO #2

Riparian Conservation Objectives #2 – Standards and Guidelines (S&Gs)			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
100. Maintain and restore the hydrologic connectivity of streams, meadows, wetlands, and other special aquatic features by identifying roads and trails that	63 of 2004 ROD	N/A	Outside the scope of this project.

intercept, divert, or disrupt natural surface and subsurface water flow paths. Implement corrective actions where necessary to restore connectivity.			
101. Ensure that culverts or other stream crossings do not create barriers to upstream or downstream passage for aquatic-dependent species. Locate water drafting sites to avoid adverse effects to in stream flows and depletion of pool habitat. Where possible, maintain and restore the timing, variability, and duration of floodplain inundation and water table elevation in meadows, wetlands, and other special aquatic features.	63 of 2004 ROD	Yes	Alt. 1 – Stream crossings using equipment is not proposed within the project. Sheep will cross the east fork Carson River at the lowest point, and only occur twice in a single season with a short duration (3 hours). Sheep access will be designated to minimize potential damage to the streambank and substrate. Alt. 2 – No Grazing alternative.
102. Prior to activities that could adversely affect streams, determine if relevant stream characteristics are within the range of natural variability. If characteristics are outside the range of natural variability, implement mitigation measures and short-term restoration actions needed to prevent further declines or cause an upward trend in conditions. Evaluate required long-term restoration actions and implement them according to their status among other restoration needs.	63 of 2004 ROD	N/A	
103. Prevent disturbance to streambanks and natural lake and pond shorelines caused by resource activities (for example, livestock, off-highway vehicles, and dispersed recreation) from exceeding 20 percent of stream reach or 20 percent of natural lake and pond shorelines. Disturbance includes bank sloughing, chiseling, trampling, and other means of exposing bare soil or cutting plant roots. This standard does not apply to developed	63 of 2004 ROD	Yes	Alt 1 – Proper use criteria includes limiting disturbance to streambanks from livestock grazing from not exceeding 20% of stream reach. Standard included in the AMP, Term Grazing Permit and AOI. Alt 2 – No impacts from livestock use.

recreation sites, sites authorized under Special Use Permits and designated off-highway vehicle routes.			
104. In stream reaches occupied by, or identified as "essential habitat" in the conservation assessment for, the Lahonton and Paiute cutthroat trout and the Little Kern golden trout, limit streambank disturbance from livestock to 10 percent of the occupied or "essential habitat" stream reach. (Conservation assessments are described in the record of decision.) Cooperate with State and Federal agencies to develop streambank disturbance standards for threatened, endangered, and sensitive species. Use the regional streambank assessment protocol. Implement corrective action where disturbance limits have been exceeded.	63 of 2004 ROD	N/A	No alternative would authorize grazing on these habitats. Alternative 1-Under the Proposed Action informal consultation occurred with FWS for the LCT occupied habitat along the east fork Carson River. The FS engaged in informal consultation with FWS and provided a concurrence letter for LCT. Sheep will only use this area to cross the river to access another grazing unit. Time will be limited to 2 days per grazing season, and short duration (3 hours). LCT habitat will be protected. Alternative 2- Under the No-Action alternative, no live-stock grazing would occur. LCT would remain undisturbed from livestock grazing and habitat will continue to move toward DFC
105. At either the landscape or project-scale, determine if the age class, structural diversity, composition, and cover of riparian vegetation are within the range of natural variability for the vegetative community. If conditions are outside the range of natural variability, consider implementing mitigation and/or restoration actions that will result in an upward trend. Actions could include restoration of aspen or other riparian vegetation where conifer encroachment is identified as a problem.	64 of 2004 ROD	yes	Project- level monitoring determined the ecological condition of the allotments. Under the Proposed Action, proper use criteria will result in an upward trend. Alt. 2- would not authorize livestock grazing and associated impacts in the project area.
106. Cooperate with Federal, Tribal, State and local governments to secure in stream flows needed to maintain, recover, and restore riparian resources, channel conditions, and aquatic habitat. Maintain	64 of 2004 ROD	NA	Acquisition of water rights outside the scope of this project. Forest Service owns water rights in the project area through the Alpine Decree except for one at California Spring.

in stream flows to protect aquatic systems to which species are uniquely adapted. Minimize the effects of stream diversions or other flow modifications from hydroelectric projects on threatened, endangered, and sensitive species.			

Standards and Guidelines Associated with RCO #3

Riparian Conservation Objectives #3 – Standards and Guidelines (S&Gs)			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
108. Determine if the level of coarse large woody debris (CWD) is within the range of natural variability in terms of frequency and distribution and is sufficient to sustain stream channel physical complexity and stability. Ensure proposed management activities move conditions toward the range of natural variability.	64 of 2004 ROD	N/A	Outside the scope of this project.

Standards and Guidelines Associated with RCO #4

Riparian Conservation Objectives #4 – Standards and Guidelines (S&Gs)			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
109. Within CARs, in occupied habitat or "essential habitat" as identified in conservation assessments for threatened, endangered, or sensitive species, evaluate the appropriate role, timing, and extent of prescribed fire. Avoid direct lighting within riparian vegetation; prescribed fires may back into riparian vegetation areas. Develop mitigation measures to avoid impacts to these species whenever ground-disturbing equipment is used.	64 of 2004 ROD	N/A	

110. Use screening devices for water drafting pumps. (Fire suppression activities are exempt during initial attack.) Use pumps with low entry velocity to minimize removal of aquatic species, including juvenile fish, amphibian egg masses and tadpoles, from aquatic habitats.	64 of 2004 ROD	N/A	
112. Post-wildfire management activities in RCAs and CARs should emphasize enhancing native vegetation cover, stabilizing channels by non-structural means, minimizing adverse effects from the existing road network, and carrying out activities identified in landscape analyses. Post-wildfire operations shall minimize the exposure of bare soil.	64 of 2004 ROD	N/A	
114. As appropriate, assess and document aquatic conditions following the Regional Stream Condition Inventory protocol prior to implementing ground disturbing activities within suitable habitat for California red-legged frog, Cascades frog, Yosemite toad, foothill and mountain yellow-legged frogs, and northern leopard frog.	65 of 2004 ROD	N/A	No suitable habitat for mountain yellow-legged frog and Yosemite Toad.
116. Identify roads, trails, OHV trails and staging areas, developed recreation sites, dispersed campgrounds, special use permits, grazing permits, and day use sites during landscape analysis. Identify conditions that degrade water quality or habitat for aquatic and riparian-dependent species. At the project level, evaluate and consider actions to ensure consistency with standards and guidelines or desired conditions.	65 of 2004 ROD	yes	Considered in cumulative effects.

Standards and Guidelines Associated with RCO #5

Riparian Conservation Objectives #5 – Standards and Guidelines (S&Gs)			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
117. Assess the hydrologic function of meadow habitats and other special aquatic features during range management analysis. Ensure that characteristics of special features are, at a minimum, at Proper Functioning Condition, as defined in the appropriate Technical Reports (or their successor publications): (1) "Process for Assessing PFC" TR 1737-9 (1993), "PFC for Lotic Areas" USDI TR 1737-15 (1998) or (2) "PFC for Lentic Riparian-Wetland Areas" USDI TR 1737-11 (1994).	65 of 2004 ROD	Yes	Alt 1 – Meadow and riparian habitat assessed using Eastern Sierra Nevada Riparian Field Guide. Proper use criteria designed to move habitats towards Functioning Condition. Alt 2- Long term monitoring will still occur as time and budgets allow.
118. Prohibit or mitigate ground-disturbing activities that adversely affect hydrologic processes that maintain water flow, water quality, or water temperature critical to sustaining bog and fen ecosystems and plant species that depend on these ecosystems. During project analysis, survey, map, and develop measures to protect bogs and fens from such activities as trampling by livestock, pack stock, humans, and wheeled vehicles. Criteria for defining bogs and fens include, but are not limited to, presence of: (1) sphagnum moss (*Spagnum spp*.), (2) mosses belonging to the genus *Meessia*, and (3) sundew (*Drosera spp*.) Complete initial plant inventories of bogs and fens within active grazing allotments prior to re-issuing permits.	65 of 2004 ROD	Yes	Alt. 1 – Concentrated livestock use prohibited within .25 of streams and waterbodies. No bogs or fens have been found within the project area, but in the future if they are found, protection measures will be developed. Alt 2- would not authorize domestic livestock grazing; therefore, these standards and guidelines would not apply.

119. Locate new facilities for gathering livestock and pack stock outside of meadows and riparian conservation areas. During project-level planning, evaluate and consider relocating existing livestock facilities outside of meadows and riparian areas. Prior to re-issuing grazing permits, assess the compatibility of livestock management facilities located in riparian conservation areas with riparian conservation objectives.	65 of 2004 ROD	N/A	The project does not propose to add any new livestock handling facilities.
120. Under season-long grazing: • For meadows in early seral status: limit livestock utilization of grass and grass-like plants to 30 percent (or minimum 6-inch stubble height). • For meadows in late seral status: limit livestock utilization of grass and grass-like plants to a maximum of 40 percent (or minimum 4-inch stubble height). Determine ecological status on all key areas monitored for grazing utilization prior to establishing utilization levels. Use Regional ecological scorecards and range plant list in regional range handbooks to determine ecological status. Analyze meadow ecological status every 3 to 5 years. If meadow ecological status is determined to be moving in a downward trend, modify or suspend grazing. Include ecological status data in a spatially explicit Geographical Information System database. Under intensive grazing systems (such as rest-rotation and deferred rotation) where meadows are receiving a period of rest, utilization levels can be higher than the levels described above if the meadow is maintained in late seral status and meadow-associated species are not being impacted. Degraded meadows (such as those in early seral status with greater than 10 percent of the meadow area in bare soil and active erosion) require total rest from	65-66 of 2004 ROD	Yes	Under the Proposed Action, the standards and guidelines associated with "season-long grazing" will be applied even though a rest-rotation, or deferred rotation strategy will be implemented. These utilization standards will result in an upward trend. Alt.2- would not authorize domestic livestock grazing; therefore, these standards and guidelines would not apply.

grazing until they have recovered and have moved to mid- or late seral status.			
121. Limit browsing to no more than 20 percent of the annual leader growth of mature riparian shrubs and no more than 20 percent of individual seedlings. Remove livestock from any area of an allotment when browsing indicates a change in livestock preference from grazing herbaceous vegetation to browsing woody riparian vegetation.	66 of 2004 ROD	Yes	Alt 1- Under the Proposed Action these standards and guidelines will be applied in the proper use criteria, and will be included in the AMP's and Annual Operating Plans. Alt. 2- would not authorize domestic livestock grazing; therefore, these standards and guidelines would not apply.

Standards and Guidelines Associated with RCO #6

Riparian Conservation Objectives #6 – Standards and Guidelines (S&Gs)			
Sierra Nevada Forest Plan Amendment	Location	Applicable	If Applicable, Where, Why and How Do Alternatives Move Us Toward DFC
122. Recommend restoration practices in: (1) areas with compaction in excess of soil quality standards, (2) areas with lowered water tables, or (3) areas that are either actively down cutting or that have historic gullies. Identify other management practices, for example, road building, recreational use, grazing, and timber harvests, that may be contributing to the observed degradation.	66 of 2004 ROD	Yes	Alt. 1 – Soil compaction and percent bare ground would slowly improve. Soil compaction and bare ground in concentrated use areas would remain. Alt. 2 – No grazing alternative. Soil compaction and percent bare ground would slowly improve without livestock use.

2016 ROD for the Greater Sage-Grouse Bi-State Distinct Population Segment Forest Plan Amendment

Category	Desired Condition
	Rangeland health assessments are meeting all standards.

	Sagebrush communities are large and intact with >65% of the landscape in sagebrush cover (Aldridge and Boyce 2007).
	The extent and dominance of invasive species, including cheatgrass, is limited to <5% (Blomberg et al. 2012).
	For security of nesting there is <3% phase I (>0 to <25% cover), no phase II (25 to 50% cover), no phase III (>50% cover), within 0.53-mile (850 meter) buffer from center of data collection plot (Casazza et al. 2011; USGS in preparation (a)).
	For winter cover and food there is <5% phase I (>0 to <25% cover), no phase II (25 to 50% cover), no phase III (>50% cover) within 0.53-mile (850 meter) buffer from center of data collection plot (USGS in preparation (a)).
	For winter cover and food the extent of the sagebrush is as follows: >85% sagebrush land cover within 0.53-mile (850 meter) buffer from center of data collection plot (USGS in prep (a), Doherty et al. 2008).
Leks	There is adjacent sagebrush cover (Connelly et al. 2000; Blomberg et al. 2012).
Category	Desired Condition
	No structures taller than the surrounding vegetation community are within line-of-sight of the lek or within 4 miles (6.5 kilometers) (Coates et al. 2013; Nevada Governor's Sage- grouse Conservation Team 2010).
	The proximity of trees >3.3 feet (one meter) above shrub canopy and within potential habitat should not be within line-of-sight of a lek and <4% of landscape canopy cover within 1 kilometer of leks (Braun 2006; Connelly et al. 2000; Stiver et al. (in press); Baruch-Mordo et al. 2013).
Nesting (Breeding)	Sagebrush canopy cover is greater than 20% (Coates et al. 2010; Kolada et al. 2009a; Kolada et al. 2009b; Connelly et al. 2000; Connelly et al. 2003; Hagen et al. 2007).
	Sagebrush species present include Artemesia tridentate subspecies (Coates et al. 2013; Kolada et al. 2009a; Kolada et al. 2009b).
	Total shrub canopy cover is greater than 40% (Coates and Delehanty 2010).
	Perennial grass cover (live and residual) is not less than 5%, but is greater than 10% if total shrub cover is less than 25% (Coats et al. 2013; Coates and Delehanty 2010; Kolada et al. 2009a; Kolada et al. 2009b).
	Annual grass cover is less than 5% (Lokyer et al. [in press]).
	Perennial grass height provides overhead and lateral concealment from predators (Connelly et al. 2000; Stiver et al. (2015); Connelly et al. 2003; Hagen et al. 2007).
	Proximity of tall structures (1 meter above shrub canopy) is not within 3 miles (Gibson et al. 2013).
Brood- Rearing/ Summer	Sagebrush canopy cover is 10 to 25% (Connelly et al. 2000).
	Perennial grass and forb cover is greater than 15% combined (Connelly et al, 2000, Hagen et al. 2007).
	Perennial forb canopy cover is >5% arid and >15% mesic for cover and food (Casazza et al. 2011; Lockyer et al. [in press])
	Grass forb heights provide lateral and overhead concealment (Kolada et al.2009b, Stivers et al. 2015).
	Manage for proper functioning condition in riparian areas/meadows for food ((Connelly et al, 2000, Stiver et al. 2015
	Understory species in the vicinity of riparian areas/meadows diversity is greater than five species present (Casazza et al. 2011; Stiver

	et al. [in press]).
	Has adjacent sagebrush cover (Connelly et al, 2000, (Connelly et al, 2000,
Winter	Winter habitat is composed of sagebrush plant communities with sagebrush canopy cover greater than 10% and sagebrush height greater than 25 centimeters (9.8 inches) above snow level (Connelly et al. 2000; USGS [in preparation]).
Date	Impacts to Consider
March 1–May 15	Breeding (critical disturbance period dates may shift 2 weeks back or forward in atypically dry or wet years based on observations of breeding/nesting activity)
April 1–June 30	Nesting and early brood-rearing (critical disturbance period dates may shift 2 weeks back or forward in atypically dry or wet years based on observations of breeding/nesting activity)
July 1–September 15	Late brood-rearing
September 1–October 31	Fall
November 1–March 1	Winter

Standards and Guides from Bi-State Sage Grouse Forest Plan Amendment

	Selected Standards and Guidelines
All Activities	**AA-S-01:** Project proposals shall include best management practices (BMPs) for each resource as appropriate to restore, conserve, and enhance bi-state sage grouse and its habitat.
	AA S-02: Total anthropogenic disturbances shall affect no more than 3% of the total bi-state sage grouse habitat within 4.7 mile of active and pending leks in the Bodie / Mount Grant, Desert Creek/Fales, and White Mountains population management unit boundaries. See definition of Anthropogenic Disturbance in glossary.
	AA S-03: Total anthropogenic disturbances shall affect no more than 1.5% of the total bi-state sage grouse habitat within 4.7 miles of active and pending leks in the Pine Nut Mountains Population Management Unit boundaries.
	AA-S-04: Habitat restoration projects shall meet one or more of the following habitat needs: Promote the maintenance of large, intact sagebrush communities; limit the expansion or dominance of invasive species, including cheatgrass; maintain or improve soil site stability, hydrologic function, and biological integrity; and enhance the native plant community.
	AA-S-05: Subject to valid existing rights, require buffers, timing limitations, or offsite habitat restoration for new or renewed disturbance actions to mitigate potential long-term impacts.
	AA-S-06: Require site-specific project mitigation to insure no permanent net loss of habitat due to project disturbance.

	AA-S-07: After severe soil disturbances or seeding, the land shall not be returned to soil-disturbing authorized uses for a minimum of three annual growing cycles or until desired habitat conditions and project objectives have been met, whichever is longer.
	AA-S-08: Subject to valid and existing rights, do not install tall structures that could serve as predator perches or decrease the use of an area within 4 miles of an active or pending lek.
	AA-S-09: Do not authorize/install new fences unless necessary for safety or environmental protection reasons. If fences must be installed, they should be at least 1.2 miles from active and pending leks, and, should be let-down fences when not needed for the purpose of their installation.
	AA-S-10: To reduce bi-state sage grouse mortality, remove, modify, or mark fences in sage grouse habitat based on nearest proximity to lek, lek size, and topography where fence densities exceed 1.6 miles of fence per section (640 acres).
	Selected Standards and Guidelines
	AA-S-11: During project implementation limit offsite noise to less than 10 decibels (dbA) above ambient measures from 2 hours before until 2 hours after sunrise at the perimeter of a lek (0.25 mile buffer around lek point) during active breeding/nesting season.
	AA-G-01-Subject to valid and existing rights, remove tall structures in bi-state sage grouse habitat within 4 miles of active of pending lek that could serve as predator perches or decrease the use of an area.
	AA-G-02: When re-seeding use genetically and climatically appropriate and certified weed-free plant and seed material. Use locally collected native perennial grass and forb seeds when available. The intent of this guideline is to move toward desired habitat conditions (Table 2-1, final EIS) when restoring habitat or mitigating disturbance.
Access/ Recreation	**AR-S-01: Authorize new roads only when necessary for public safety, administrative, or public need to accommodate valid existing rights and to minimize disturbance footprint of ROWs in bi-state habitat.**
	AR-S-02: Between March 1 and June 30, off-highway vehicle events that pass within 4 miles of an active or pending lek shall not be authorized. Critical disturbance period dates may shift 2 weeks back or forward in atypically dry or wet years based on observations of breeding/nesting activity
	AR-S-03: Do not authorize off-highway vehicle events within winter habitats November 1 to March 1.
	AR-S-04: Prohibit new recreation facilities in bi-state sage grouse habitat (e.g., campgrounds, day use areas, scenic pullouts, trailheads, etc.).
	AR-G-01: Use existing roads and co-locate powerlines, pipelines, and other linear features to reduce disturbance and habitat fragmentation and to minimize disturbance footprint of rights-of-way (ROWs) in bi-state habitat.

Land Use/Special Use	**LUSU-S-01: Do not grant new ROWs. If valid existing rights apply, co-locate new ROWs within existing ROWs or where it minimizes impacts to bi-state sage grouse habitat.**
	LUSU-S-02: When informed that a ROW is no longer in use, relinquish the ROW and reclaim the site by removing powerlines, reclaiming roads, and removing other infrastructure within bi-state sage grouse habitat, where such reclamation work does not create adverse effects.
	LUSU-S-03: Do not authorize utility-scale commercial wind energy facilities.
	LUSU-S-04: Do not authorize utility-scale solar energy facilities.
	Selected Standards and Guidelines
	LUSU-G-02 Industrial wind facilities associated (on site) with existing industrial infrastructure (e.g., a mine site) may be authorized to provide onsite power generation and to minimize disturbance footprint of ROWs in bi-state sage grouse habitat.
	LUSU-G-03: Industrial solar energy facilities (on site) associated with existing industrial infrastructure (e.g., a mine site) may be authorized to provide on-site power generation and minimize the disturbance footprint related to powerlines in habitat.
	LUSU-G-04: Where feasible, bury powerlines to reduce overhead perches for avian predators.
	LUSU-S-05: Require permit holders to retro-fit existing powerlines and other utility structures within 4 miles of an active or pending lek with perch-deterring devices during ROW renewal process. The intent is to reduce perch opportunities for avian predators.
	LUSU-S-06: Federal lands shall be retained unless a public interest determination identifies a net benefit to bi-state sage grouse habitat.
	LUSU-S-07: Land acquisition plan shall include all inholdings that include bi-state sage grouse habitat within national forest system boundaries.
	LUSU-S-08: Do not authorize outfitter-guide activities in bi-state sage grouse habitat that occur within 4 miles of active leks from March 1 to June 30. Critical disturbance period dates may shift 2 weeks back or forward in atypically dry or wet years based on observations of breeding/nesting activity.
	LUSU-S-09: Require proper containment and prompt removal of refuse to avoid attracting predators/scavengers.
	LUSU-S-10: Do not authorize new high-power (120 kV) transmission line corridors, transmission line ROWs, transmission line construction, or transmission line facility construction in habitat outside existing corridors.

<table>
<tr><td rowspan="5">Wildlife</td><td>Wild-S-01: Any vegetation treatment shall maintain, improve, or restore bi-state sage grouse habitat.</td></tr>
<tr><td>Wild-S-02: Vegetation treatments and post-disturbance restoration shall seed and/or transplant sagebrush to restore large patches of sagebrush cover and connect existing patches.</td></tr>
<tr><td>Wild-S-03: Time implementation of habitat restoration projects so that impacts to bi-state sage grouse individuals and populations are limited by duration, scope, and scale.</td></tr>
<tr><td>Wild-G-01: Remove phase 1 and 2 pinyon-juniper located in habitat during habitat restoration projects with the intent to maintain sagebrush habitat prior to establishment of forest species.</td></tr>
<tr><td>Selected Standards and Guidelines</td></tr>
<tr><td rowspan="2">Range: Permitting</td><td>RP-S-01: Grazing permits, annual operating instructions, or other appropriate mechanism for livestock management shall include terms, conditions, and direction to move toward or maintain bi-state sage grouse habitat desired conditions.</td></tr>
<tr><td>RP-G-01: In bi-state sage grouse habitat, consider closure of grazing allotments, pastures, or portions of pastures, or managing the allotment as a forage reserve as consistent with maintaining sage-grouse habitat based on desired conditions as opportunities arise under applicable regulations, where removal of livestock grazing would enhance the ability to achieve desired bi-state sage grouse habitat conditions (ROD Table 1a or 1b).</td></tr>
<tr><td rowspan="2">Range: Utilization Standards</td><td>RU-S-01: Manage livestock grazing to maintain residual cover of herbaceous vegetation so as to reduce predation during breeding/nesting season (March 1 to June 30 critical disturbance period dates may shift 2 weeks back or forward in atypically dry or wet years based on observations of breeding/nesting activity).</td></tr>
<tr><td>RU-S-02: Manage livestock grazing in accordance with the utilization standards in this table.
<table>
<tr><th>Community Type</th><th>Percent Utilization of Key Species</th><th>Terms and Conditions</th></tr>
<tr><td>Mountain Big Sagebrush</td><td><45% herbaceous species;
<35% shrub species</td><td>Livestock removed in 5 days of reaching utilization level</td></tr>
<tr><td>Wyoming and Basin Big Sagebrush</td><td><35% herbaceous species;
<35% shrub species</td><td>Livestock removed in 5 days of reaching utilization level</td></tr>
<tr><td>Black Sagebrush</td><td><35% herbaceous species;
<35% shrub species</td><td>Livestock removed in 5 days of reaching utilization level</td></tr>
</table></td></tr>
</table>

	Riparian and Wet Meadows	<50% herbaceous species; <35% woody species (current year's growth); or average stubble height of at least 4–6 inches (depending on site capability and potential) for herbaceous riparian vegetation	Average stubble height 4–6 inches: Livestock removed in 5 days of reaching utilization level based on site; or (sequential action) no grazing from May 15–August 30 in brood-rearing habitat
Range: Improvements (All)	**RI-S-01:** Any new structural range improvements and location of supplements (salt or protein blocks) shall not retard the conservation, enhancement, or restoration of bi-state sage grouse habitat.		
	RI-S-02: Salting or supplemental feeding stations shall not be located within 2 miles of an active lek and 0.6 miles from riparian areas.		
	Selected Standards and Guidelines		
Range: Improvements (Water)	**RI-S-03: Water developments (tanks/troughs) shall be drained when not in use, unless they are needed by other species, so they do not create a breeding habitat for mosquitos that disease such as West Nile Virus.**		
	RI-S-04: Wildlife escape ramps shall be installed and maintained in water troughs or open water facilities with vertical embankments that pose a drowning risk to birds.		
	RI-S-05: Water developments at springs and seeps shall be maintained to preserve the continuity of predevelopment riparian areas. Modifications to the developments shall be neutral or beneficial to the bi-state sage grouse.		
	RI-S-06: Livestock watering and handling facilities (corrals, chutes, dipping vats, etc.) or sheep bedding grounds shall not be located within 2 miles of an active lek and 0.6 miles from riparian areas.		
	RI-G-01: Authorize new water development for diversion from spring or seep source only when habitat would benefit from the development. The intent of this guideline is to move toward desired habitat conditions (Table 2-1, final EIS) when restoring habitat or mitigating disturbance.		
Weeds	**Weed-S01: Treatment methodologies are based on the treatment areas' resistance to annual invasive grasses and the resilience of native vegetation to respond after disturbance: (1) use mechanical treatments (i.e., do not use fire) in areas with relatively low resistance to annuals, and (2) treat areas in early- to mid-phase pinyon-juniper expansion.**		
	Weed-S-02: Use pesticides/herbicides only outside of the critical disturbance periods and only if other integrated pest management approaches are inadequate or infeasible. Only use chemicals with the lowest toxicity to birds that still provide control in coordination with USDA or APHIS, depending on the targeted pest.		
	Weed-S-03: Agency personnel, contractors, and permit holders working in areas with known weed infestations shall clean vehicles of dirt, mud, and visible plant debris before entering a different area to reduce the spread of noxious weeds.		

	Weed-S0-4: Annual invasive grasses shall be controlled or suppressed using an integrated strategy.
	Weed G-01: Grazing may be used to target removal of cheatgrass or other vegetation hindering bi-state sage grouse objectives where monocultures occur to reduce risk of fire and achieve or move toward desired habitat conditions. Sheep, goats, or cattle may be used as long as the animals are intensely managed and removed when incidental utilization of desirable species reaches 25%.
	Weed-G-02: Require aggressive treatment of new weed or annual grass infestation form any surface-disturbing or other activity that is likely to cause or promote the introduction or infestation to control the potential spread of noxious and invasive annual grass species.
	Selected Standards and Guidelines
Wild Horse/ Burro	**WHB-S-01: Appropriate management levels in territories and herd management areas with habitat shall be based on the structure, condition, and composition of vegetation needed to achieve bi-state sage grouse habitat objectives.**
Minerals General	**MG-S-01: Apply timing restrictions between March 1 and June 30 within 4 miles of active or pending leks to avoid construction, drilling, completion, geophysical explorations, and reclamation activities, including those of exploratory wildcat wells. Critical disturbance period dates may shift 2 weeks back or forward in atypically dry or wet years based on observations of breeding/nesting activity.**
	MG-S-02: In connective area, maintain vegetation characteristics suitable to bi-state sage grouse to the extent technically feasible.
	Min-S-03: Control fugitive dust on roads and pads.
	MG-S-04: Require a full reclamation bond specific to the site. Insure bonds are sufficient for costs relative to reclamation that would result in full restoration in habitat.
	MG-S-05: Use areas with prior disturbance to site infrastructure.
	MG-S-06: Camps for workers shall be located outside habitat.
	MG-G-01: On current/existing leases concentrate disturbance/facilities to reduce spatial impact to habitat. The intent of the guideline is to minimize disturbance footprint wherever possible.
Fluid Minerals	**MF-S-01: For fluid minerals do not consent to leasing in bi-state sage grouse habitat unless under no-surface-occupancy without exceptions, modifications or waivers.**

	MF-S-02: Between November 1 and June 30, seismic and geophysical exploration within 4 miles of an active or pending lek shall not be authorized. During other times, apply the least invasive seismic and geophysical exploratory methods in habitat. Critical disturbance period the June 30 dates may shift 2 weeks back or forward in atypically dry or wet years based on observations of breeding/nesting activity
	MF-S-03: All commercial pipelines shall be buried where possible.
	MF-S-04: Upon expiration or termination of existing leases in bi-state sage grouse habitat, do not consent to leasing.
	MF-S-05: Require reclamation of disturbed areas to move toward desired conditions for habitat when facilities are no longer needed or leases are relinquished.
	MF-S-06: Use closed-loop systems for drilling operations, with no reserve pits when technically feasible.
	Selected Standards and Guidelines
	MF-S-07: Use noise shields when drilling during the breeding, nesting, brood-rearing, and wintering seasons.
	MF-S-08: Do not authorize new compressor stations inside habitats.
	MF-G-01: Allow geophysical exploration to obtain exploratory information for areas outside of and adjacent to habitat to provide continued opportunities that would not disturb bi-state sage grouse habitat.
	MF-G-02: Limit disturbances to an average of one site per 640 acres on average, subject to valid existing rights. The intent of the guideline is to minimize disturbance footprint wherever possible.
	MF-G-03: Incorporate mitigation to offset all proposed surface disturbance that would result in loss of habitat. Mitigate first within the same population area where the disturbance is realized, and if not possible, within an adjacent habitat. The intent of this guideline is to move toward desired habitat conditions (Table 2-1, final EIS) when restoring habitat or mitigating disturbance.
	MF-G-04: If the lease is entirely within habitat, any development should be placed in an area that would be the least harmful to bi-state sage grouse, primarily through limiting ground disturbance to minimize the disturbance footprint in habitat.
Solid Leasable Minerals	**MS-S-01: Do not consent to solid mineral lease in habitat.**

	MS-S-02: Request that the BLM not issue permits for solid leasable mineral prospecting or mining in habitat.
	MS-G-01: If new mine facilities must be placed in habitat, then co-locate facilities in existing disturbed areas and authorize them to the minimum size necessary to reduce the disturbance footprint in habitat.
Mineral Materials	**MM-S-01: Do not authorize new pits or prospecting permits in bi-state sage grouse habitat.**
	MM-S-02: Authorize mineral material use and expansion of existing pits only with no unmitigated net loss of habitat.
	MM-S-03: Permits for existing mineral material sites shall require an approved pit development operating plan that minimizes impacts to bi-state sage grouse and other resources.
	MM-S-04: Any contract or permit for mineral material operations, except for disposals from community sites and common-use areas, shall include requirements for reclamation of the site to meet bi-state sage grouse habitat objectives.
	MM-S-05 Ensure no net unmitigated loss at existing mineral material sites in habitat.
	MM-S-06: Where the Federal government owns the surface, and the mineral estate is in non-Federal ownership, require an approved pit development plan.
	Selected Standards and Guidelines
Locatable Minerals	**ML-S-01: Mitigate long-term negative impacts in habitat from discretionary or nondiscretionary activities to the extent practicable.**
Fire Suppression	**FS-S-01: Fires in moderate to low resilience and resistance sagebrush and wooded shrublands shall be suppressed to prevent an invasive annual grass-fire cycle.**
	FS-G-01: Do not use fire as a management tool in areas where the risk of escaped fire could cause negative long-term impacts during wildfire situations.
	FS-G-02: In bi-state sage grouse habitat areas, prioritize suppression, immediately after life and property, to conserve the habitat during wildfire situations.
	FS-G-03: Suppress wildfire threatening unburned habitat contained within a broader burn perimeter.

Suppression in Wildland-urban Interface	**FS-G-05: In bi-state sage grouse habitat areas, habitat meeting or moving towards desired condition will be prioritized immediately after direct threats to life and property; suppression in the Wildland-Urban Interface will be prioritized above habitat in order to protect life and property.**
Fuels Treatments in Sagebrush	**FT-S-01: Do not reduce sagebrush canopy cover to less than 15% (Connelly et al. 2000; Hagen et al. 2007) unless a fuels management objective requires additional reduction in sagebrush cover to meet strategic protection of bi-state sage- grouse habitat and conserve habitat quality for the species.**
	FT-S-02: Enhance and restore habitat while reducing the potential for severe wildfires in habitat.
	FT-G-01: Use fuel breaks and green strips to protect areas with >25% landscape sagebrush cover to provide protection for habitat that is moving toward or meeting desired condition.
	FT-G-02: Do not use prescribed fire, except for pile burning, in 12-inch or less precipitation zones, in areas where there is threat of cheatgrass invasion, or areas where the sagebrush cover would be reduced to less than 15% unless necessary to facilitate site preparation for restoration of Bi-State sage grouse habitat consistent with desired conditions..
	FS-G-03: Vegetation treatments should include fuel breaks to provide anchor points for wildland fire suppression to protect areas meeting or moving toward desired conditions
Prescribed Fire	**FP-S-01: To reduce the risk of habitat loss related to management actions do not use fire as a management tool in areas where the risk of escaped fire could cause negative long-term impacts.**
	FP-S-03: Annual invasive grasses shall be controlled or suppressed using an integrated strategy.
	Selected Standards and Guidelines
	FP-G-02: Manage post-treatment areas to increase perennial herbaceous species and minimize secondary weed invasion. The intent is to use fire only where it can do the most good and least harm to meet the purpose of the amendment and be consistent with Wild-S-01.